# Aspire 1820PT/1420P Series

# Service Guide

Service guide files and updates are available on the ACER/CSD web; for more information, please refer to http://csd.acer.com.tw

PRINTED IN TAIWAN

# Revision History

Please refer to the table below for the updates made on this service guide.

| Date | Chapter | Updates |
|---|---|---|
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## Conventions

The following conventions are used in this manual:

| | |
|---|---|
| **SCREEN MESSAGES** | Denotes actual messages that appear on screen. |
| **NOTE** | Gives bits and pieces of additional information related to the current topic. |
| **WARNING** | Alerts you to any damage that might result from doing or not doing specific actions. |
| **CAUTION** | Gives precautionary measures to avoid possible hardware or software problems. |
| **IMPORTANT** | Reminds you to do specific actions relevant to the accomplishment of procedures. |

# Preface

Before using this information and the product it supports, please read the following general information.

1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

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# System Specifications

## Features

Below is a brief summary of the computer's many features:

### Operating System

- Genuine Windows® 7

### Platform

- Intel® Core™2 Duo processor*
- Intel® Pentium® mobile processor*
- Intel® Celeron® mobile processor*
- Mobile Intel® GS45 Express Chipset

### System Memory

- Dual-Channel SDRAM support
- Up to 4 GB of DDR3 1066 MHz memory, upgradeable to 8 GB using two soDIMM modules

### Display and graphics

- 11.6" HD 1366 x 768
- Convertible display
- Mobile Intel® GS45 Express Chipset

### Storage subsystem

- 2.5" hard disk drive
- Multi-in-1 card reader

### Audio subsystem

- Optimized 2nd Generation Dolby® Sound Room® audio enhancement
- High-definition audio support
- S/PDIF (Sony/Philips Digital Interface) support for digital speakers
- MS-Sound compatible
- Built-in microphone

### Communication

- Integrated Acer Crystal Eye webcam*
- WWAN: UMTS/HSPA at 850/900/1900/2100 MHz and quad-band GSM/GPRS/EDGE (850/900/1800/1900 MHz)*

- WLAN:
  - Intel® WiFi Link 5100 802.11a/b/g/Draft-N*
  - Intel® WiFi Link 5100 802.11a/b/g*
  - Intel® WiFi Link 1000*
- WPAN: Bluetooth® 2.1+Enhanced Data Rate*
- LAN: Gigabit Ethernet; Wake-on-LAN ready

## Privacy control

- BIOS user, supervisor, HDD passwords
- Kensington lock slot

## Dimensions and Weight

- 285 (W) 208.9 (D) 28.5/34.5 (H) mm (11.22 x 8.22 x 1.12/1.36 inches)
- 1.72 kg (3.79 lbs.) (non-3G SKU)

## Power subsystem

- ACPI 3.0
- 62.16 W 5600 mAh
- 3-pin 30 W AC adapter
- ENERGY STAR®*

## Special keys and controls

- 84-/85-/88-key keyboard
- Multi-gesture touchpad pointing device

## I/O interface

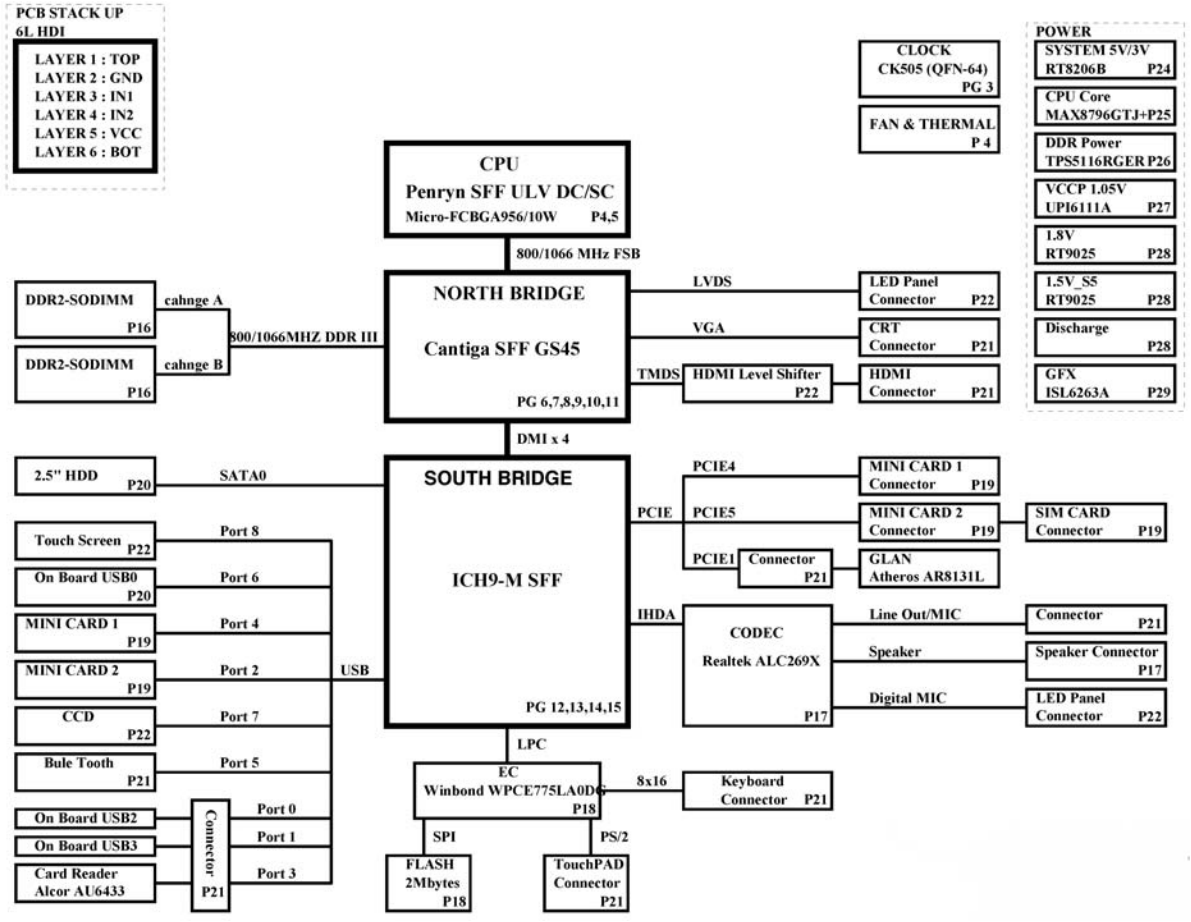
- Multi-in-1 card reader (SD/MMC/MS/MS PRO/xD)
- USB 2.0 port
- HDMI™ port with HDCP support
- External display (VGA) port
- Headphones/speaker/line-out jack with S/PDIF support
- Microphone-in jack
- Ethernet (RJ-45) port
- DC-in jack for AC adapter

## Environment

- Temperature:
  - Operating: 5 °C to 35 °C
  - Non-operating: -20 °C to 65 °C
- Humidity (non-condensing):
  - Operating: 20% to 80%
  - Non-operating: 20% to 80%

**NOTE:** The specifications listed above are for reference only. The exact configuration of the PC depends on the model purchased.

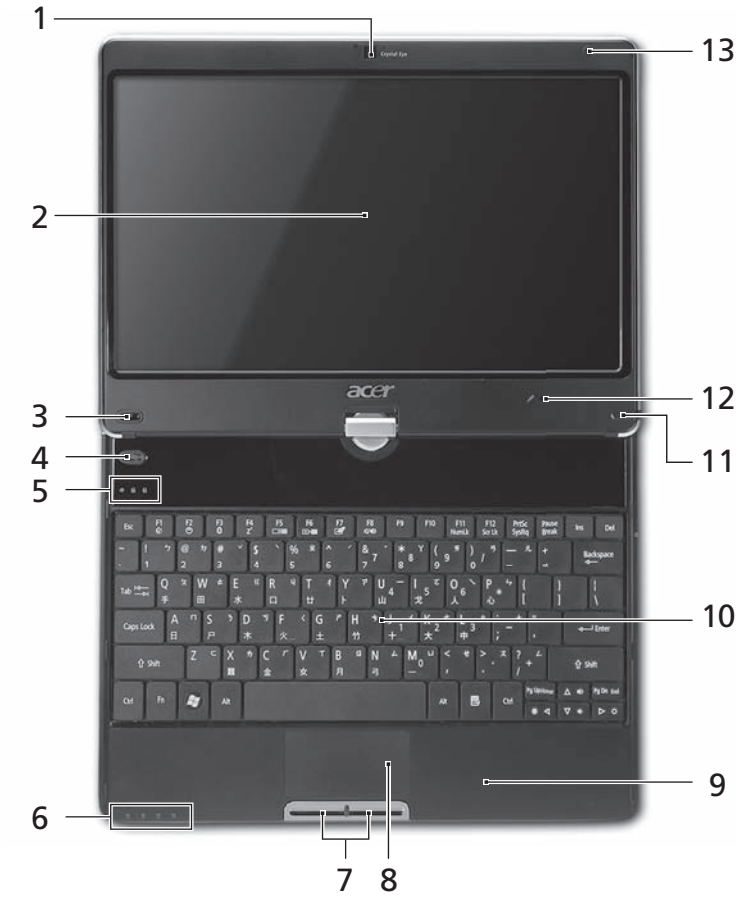
# System Block Diagram



# Your Notebook Tour

This section provides an overview of the features and functions of the notebook.

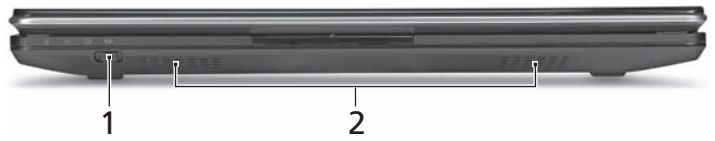
## Front View




| No. | Icon | Item | Description |
|---|---|---|---|
| 1 | | Acer Crystal Eye webcam | Web camera for video communication |
| 2 | | Display screen | Also called Liquid-Crystal Display (LCD), displays computer output (Configuration may vary by models). |
| 3 | P | Programmable key | Launch predefined programs or user defined programs at the push of a button. |
| 4 | | Backup key | Press to start automatic backup procedure. |
| 5 | | HDD | Indicates when the hard drive is active. |
| | | Num Lock | Lights up when the Num Lock is activated. |
| | | Caps Lock | Lights up when Caps Lock is activated. |

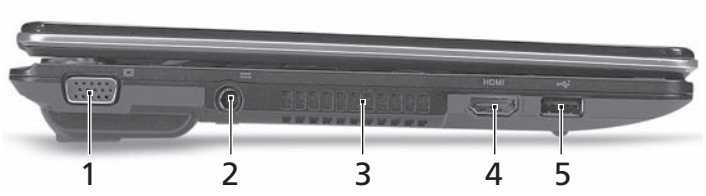
| No. | Icon | Item | Description |
|---|---|---|---|
| 6 | | Power | Indicated the computer's power status. |
| | | Battery | Indicates the computer's battery status.<br>1. Charging: The light shows amber when the battery is charging.<br>2. Fully charged: The light shows blue when in AC mode. |
| | | Bluetooth communication indicator | Indicates the status of Bluetooth communication. (only for certain models) |
| | | Communication indicator | Indicates the status of WLAN / 3G communication. |
| 7 | | Click buttons (left and right) | The left and right buttons function like the left and right mouse buttons. |
| 8 | | Touchpad | Touch-sensitive pointing device which functions like a computer mouse. |
| 9 | | Palmrest | Comfortable support area for your hands when you use the computer. |
| 10 | | Keyboard | For entering data into your computer. |
| 11 | | Stylus | A pen tool for entering data into your computer |
| 12 | | Microphone | Internal microphone for sound recording |
| 13 | | Magnetic lock | A lock that snaps into place to prevent the screen from inadvertently rotating. |

## Closed Front View



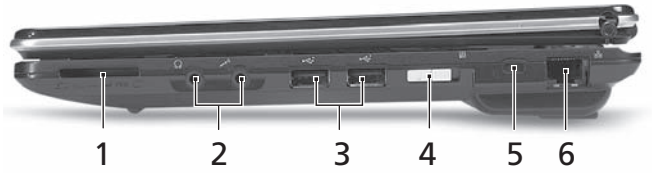

| No. | Icon | Item | Description |
|---|---|---|---|
| 1 | | Communication key | Enables / disables the WLAN / 3G functions. |
| 2 | | Speakers | Left and right speakers deliver stereo audio output. |

# Left View




| No. | Icon | Item | Description |
|---|---|---|---|
| 1 | | External display (VGA) port | Connects to a display device (e.g. external monitor, LCD projector). |
| 2 | | DC-in jack | Connects to an AC adapter |
| 3 | | Ventilation slots | Enable the computer to stay cool, even after prolonged use. |
| 4 | HDMI | HDMI port | Supports high definition digital video connections. |
| 5 | | USB 2.0 port | Connect to USB 2.0 devices (e.g., USB mouse, USB camera). |

# Right View



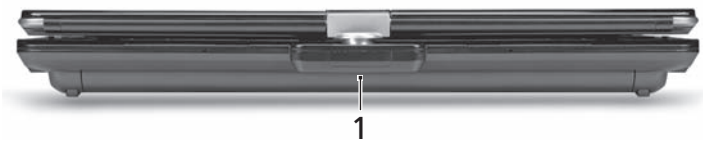

| No. | Icon | Item | Description |
|---|---|---|---|
| 1 | SD xD PRO | Multi-in-1 card reader | Accepts Secure Digital (SD), MultiMediaCard (MMC), Memory Stick (MS), Memory Stick PRO (MS PRO), xD-Picture Card (xD).<br>Note: Push to remove/install the card. Only one card can operate at any given time. |
| 2 | SPDIF | Headphones/ speaker/line-out jack with S/PDIF support | Connects to audio line-out devices (e.g., speakers, headphones). |
| | | Microphone-in jack | Accepts inputs from external microphones. |
| 3 | | USB 2.0 port | Connects to USB 2.0 devices<br>(e.g., USB mouse, USB camera). |
| 4 | | Power button / indicator | Slide the power button to turn the computer on and off. / Indicates the computer's power status. |

| | | | |
|---|---|---|---|
| 5 | | Kensington lock slot | Connects to a Kensington-compatible computer security lock.<br>Note: Wrap the computer security lock cable around an immovable object such as a table or handle of a locked drawer. Insert the lock into the notch and turn the key to secure the lock. Some keyless models are also available. |
| 6 | | Ethernet (RJ-45) port | Connects to an Ethernet 10/100/1000-based network. |

# Base View

| No. | Icon | Item | Description |
|---|---|---|---|
| 1 | | Battery bay | Houses the computer's battery pack. |
| 2 | | Hard disk bay | Houses the computer's hard disk (secured with screws). |
| 3 | | Memory compartment | Houses the computer's main memory. |
| 4 | | Ventilation slots and cooling fan | Enable the computer to stay cool, even after prolonged use.<br>Note: Do not cover or obstruct the opening of the fan. |
| 5 | | Battery lock | Locks the battery in position. |
| 6 | | Battery release latch | Releases the battery for removal. |

# Rear View




| No. | Icon | Item | Description |
|---|---|---|---|
| 1 | | Battery bay | Houses the computer's battery pack. |

# Indicators

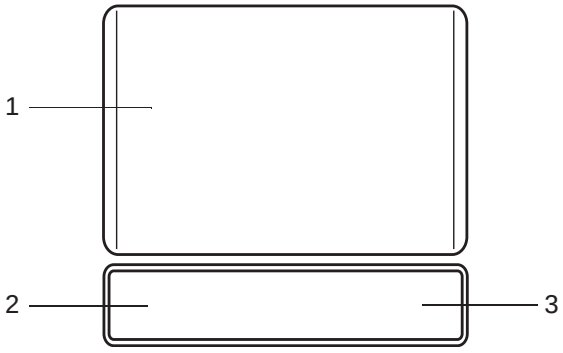
The computer has several easy-to-read status indicators. The battery indicator is visible even when the computer cover is closed.

| Icon | Function | Description |
|---|---|---|
| | Bluetooth | Indicates the status of Bluetooth communication. |
| | Wireless LAN | Indicates the status of Wireless LAN/3G communication. |
| | HDD | Indicates when the hard disk drive is active. |
| | Num Lock | Lights up when Num Lock is activated. |
| | Caps Lock | Lights up when Caps Lock is activated. |
| | Battery | Indicates the computer's battery status. |

**NOTE:** 1. **Charging:** The battery light shows amber when the battery is charging. 2. **Fully charged:** The light shows green when in AC mode.

# TouchPad Basics

The following items show you how to use the TouchPad:




- Move your finger across the TouchPad (1) to move the cursor.
- Press the left (2) and right (3) buttons located beneath the TouchPad to perform selection and execution functions. These two buttons are similar to the left and right buttons on a mouse. Tapping on the TouchPad is the same as clicking the left button.

| Function | Left Button (2) | Right Button (3) | Main TouchPad (1) |
|---|---|---|---|
| Execute | Quickly click twice. | | Tap twice (at the same speed as double-clicking a mouse button). |
| Select | Click once. | | Tap once. |
| Drag | Click and hold, then use finger on the TouchPad to drag the cursor. | | Tap twice (at the same speed as double-clicking a mouse button); rest your finger on the TouchPad on the second tap and drag the cursor. |
| Access context menu | | Click once. | |

**NOTE:** When using the TouchPad, keep it - and your fingers - dry and clean. The TouchPad is sensitive to finger movement; hence, the lighter the touch, the better the response. Tapping too hard will not increase the TouchPad's responsiveness.

# Using the Keyboard

This computer has a close-to-full-sized keyboard and an embedded numeric keypad, separate cursor, lock, function and special keys.

## Lock Keys and embedded numeric keypad

The keyboard has three lock keys which you can toggle on and off.

| Lock key | Description |
|---|---|
| Caps Lock | When Caps Lock is on, all alphabetic characters typed are in uppercase. |
| Num Lock **<Fn> + <F11>** | When Num Lock is on, the embedded keypad is in numeric mode. The keys function as a calculator (complete with the arithmetic operators +, -, *, and /). Use this mode when you need to do a lot of numeric data entry. A better solution would be to connect an external keypad. |
| Scroll Lock **<Fn> + <F12>** | When Scroll Lock is on, the screen moves one line up or down when you press the up or down arrow keys respectively. Scroll Lock does not work with some applications. |

The embedded numeric keypad functions like a desktop numeric keypad. It is indicated by small characters located on the upper right corner of the keycaps. To simplify the keyboard legend, cursor-control key symbols are not printed on the keys.

| Desired access | Num Lock on | Num Lock off |
|---|---|---|
| Number keys on embedded keypad | Type numbers in a normal manner. | |
| Cursor-control keys on embedded keypad | Hold <Shift> while using cursor-control keys. | Hold <Fn> while using cursor-control keys. |
| Main keyboard keys | Hold **<Fn>** while typing letters on embedded keypad. | Type the letters in a normal manner. |

# Windows Keys

The keyboard has two keys that perform Windows-specific functions.

| Key | Description |
|---|---|
| Windows key | Pressed alone, this key has the same effect as clicking on the Windows Start button; it launches the Start menu. It can also be used with other keys to provide a variety of functions:<br>**<⊞>:** Open or close the Start menu<br>**<⊞> + <D>:** Display the desktop<br>**<⊞> + <E>:** Open Windows Explore<br>**<⊞> + <F>:** Search for a file or folder<br>**<⊞> + <L>:** Lock your computer (if you are connected to a network domain), or switch users (if you're not connected to a network domain)<br>**<⊞> + <M>:** Minimizes all windows<br>**<⊞> + <R>:** Open the Run dialog box<br>**<⊞> + <U>:** Open Ease of Access Center<br>**<⊞> + <BREAK>:** Display the System Properties dialog box<br>**<⊞> + <TAB>:** Cycle through programs on the taskbar<br>**<CTRL> + <⊞> + <F>:** Search for computers (if you are on a network)<br>**Note:** Depending on your edition of Windows 7, some shortcuts may not function as described. |
| Application key | This key has the same effect as clicking the right mouse button; it opens the application's context menu. |

# Hot Keys

The computer employs hotkeys or key combinations to access most of the computer's controls like screen brightness and volume output.

To activate hotkeys, press and hold the **<Fn>** key before pressing the other key in the hotkey combination.

| Hotkey | Icon | Function | Description |
|---|---|---|---|
| <Fn> + <F1> | | Power management | Launch Windows power management. |
| <Fn> + <F2> | | System Properties | Display the System Properties dialog box. |
| <Fn> + <F3> | | Bluetooth communication switch | Enables/disables the Bluetooth function. |
| <Fn> + <F4> | | Sleep | Puts the computer in Sleep mode. |
| <Fn> + <F5> | | Display toggle | Switches display output between the display screen, external monitor (if connected) and both. |
| <Fn> + <F6> | | Screen blank | Turns the display screen backlight off to save power. Press any key to return. |
| <Fn> + <F7> | | Touchpad toggle | Turns the internal touchpad on and off. |
| <Fn> + <F8> | | Speaker toggle | Turns the speakers on and off. |
| <Fn> + <▷> | | Brightness up | Increases the screen brightness. |
| <Fn> + <◁> | | Brightness down | Decreases the screen brightness. |
| <Fn> + <△> | | Volume up | Increases the sound volume. |
| <Fn> + <▽> | | Volume down | Decreases the sound volume. |

# Special Keys

You can locate the Euro symbol and the US dollar sign at the upper-center and/or bottom-right of your keyboard.

## The Euro symbol

1. Open a text editor or word processor.
2. Hold <Alt Gr> and then press the <5> key at the upper-center of the keyboard.

**NOTE:** Some fonts and software do not support the Euro symbol. See **www.microsoft.com/typography/faq/faq12.htm** for more information.

## The US dollar sign

1. Open a text editor or word processor.
2. Hold **<Shift>** and then press the **<4>** key at the upper-center of the keyboard.

**NOTE:** This function varies according to the language settings.

# Hardware Specifications and Configurations

**Processor**

| Item | Specification |
|---|---|
| CPU type | Intel Penryn SFF (ULV) |
| CPU package | Micro-FCBGA 956 balls |
| Features | • Supports Intel architecture with Dynamic execution.<br>• On-die, primary 32-kB instruction cache and 32-kB write-back data cache.<br>• On-die, up to 3MB second level shared cache with advanced transfer cache architecture.<br>• Streaming SIMD Extensions 2 (SSE2),Streaming SIMD Extensions 3 (SSE3)<br>• Supplemental streaming SIMD extensions 3 (SSSE3) and SSE4.1 instruction sets.<br>• 800MHz source-synchronous front side bus (FSB)<br>• Advanced power management features including Enhanced Intel SpeedStep®<br>• Technology and dynamic FSB frequency switching.<br>• Digital thermal sensor (DTS).<br>• Execute disable bit support for enhanced security.<br>• Intel® Dynamic Acceleration Technology and Enhanced Multi Threaded<br>• Thermal Management (EmTTM).<br>• Support enhanced Intel Virtualization Technology. |
| Core Logic | • Mobile Intel® GS45 Express Chipset |

**Processor Specifications**

| Item | CPU Speed | Cores | Cache Size | Package | Core Voltage | Acer P/N |
|---|---|---|---|---|---|---|
| SU7300 | 1.4GHz | 1 | 3MB | Micro-FCBGA 956 balls | 1.050V-1.150V | C2DSU7300B |
| SU4100 | 1.3GHz | 2 | 2MB | Micro-FCBGA 956 balls | 1.050V-1.150V | PMDSU4100B |
| SU2300 | 1.2GHz | 2 | 1MB | Micro-FCBGA 956 balls | 1.050V-1.150V | CMSU2300B |

**CPU Fan True Value Table**

| CPU Temperature (Celsius) | Fan Speed (RPM) | SPL Spec (dBA) |
|---|---|---|
| 38 | 2400 | On |
| 43 | 3300 | 26 |
| 49 | 4000 | 29 |
| 56 | 4500 | 31 |

Throttling 50%: On = 88°C; Off = 85°C

EC shut down at 95°C; H/W shut down at 98°C

**North Bridge Specifications**

| Item | Specification |
|---|---|
| Chipset | Intel Crestline GS45 SFF |
| Package | FCBGA 1363 balls |

| Item | Specification |
|---|---|
| Features | • Processor host bus supports 667/800/1066Mhz FSB support.<br>• Supports Dual Channel DDR3 SD-RAM at 800/1066MHz.<br>• Integrated SDRAM controller up to *GB (2 SODIMM support)<br>• DMI x2 and DMI x4 for connection between GMCH and ICH9M. |

**South Bridge Specifications**

| Item | Specification |
|---|---|
| Chipset | ICH9M SFF |
| Package | BGA 676 balls |
| Features | • Upstream accelerated Hub architecture interface for access to GMCH.<br>• PCI Express Base Specification, Revision 1.1 support.<br>• PCI 2.3 interface. (4 PCI Request/Grant pairs).<br>• ACPI Power Management Logic Support. Enhanced DMA controller, interrupt controller, timers functions.<br>• Integrated Serial ATA host controllers with independent DMA operation on six ports and AHCI support.<br>• USB 1.1 & USB 2.0 Host controllers.<br>• Supports Intel High Definition Audio (Intel HD Audio) Interface.<br>• Supports Intel® Matrix Storage Technology.<br>• Supports Intel® Active Management Technology.<br>• Low Pin Count (LPC) interface.<br>• 6 PCIe ports. |

**System Memory**

| Item | Specification |
|---|---|
| Memory size | 0MB (No on-board Memory) |
| DIMM socket number | 2 sockets |
| Supports memory size per socket | 2GB |
| Supports maximum memory size | 4GB for 64bit OS (with two 2GB SO-DIMM) |
| Supports DIMM type | DDR3 Synchronous DRAM |
| Supports DIMM Speed | 800 MHz |
| Supports DIMM voltage | 1.5V |
| Supports DIMM package | 204-pin DDR3-800 SO-DIMM |
| Module Combination | Any combination permissible within the above specifications. |

**Hard Disk Drive Interface**

| Item | Specifications | | | | | |
|---|---|---|---|---|---|---|
| Vendor & Model Name | Hitachi HTS545050B 9A300 | Hitachi HTS545032B 9A300 | Hitachi HTS545025B 9A300 | Hitachi HTS545016B 9A300 | Hitachi HTS543225L 9A300 | Hitachi HTS543216L9 SA00 |
| Capacity (GB) | 500 | 320 | 250 | 160 | 250 | 160 |
| Bytes per sector | 512 | | | | | |
| Data heads | 4 | 3 | 2 | 2 | 3 | 2 |
| Drive Format | | | | | | |

| Item | Specifications | | | | | |
|---|---|---|---|---|---|---|
| Disks | 2 | 2 | 1 | 1 | 2 | 1 |
| Spindle speed (RPM) | 5400 | | | | | |
| Performance Specifications | | | | | | |
| Buffer size | 8MB | | | | | |
| Interface | SATA | | | | | |
| Internal transfer rate (Gbits/ sec., max) | 3GB/s maximum | | | | | 1.5GB/s maximum |
| I/O data transfer rate (Mbytes/ sec max) | 875 Mbits/s maximum | | | 845 Mbits/s maximum | 775Mbits/s maximum | 729Mbits/s maximum |
| DC Power Requirements | | | | | | |
| Voltage | +5.0V ± 5%. | | | | | |

| Item | Specifications | | | |
|---|---|---|---|---|
| Vendor & Model Name | Toshiba MK1655GSX | Toshiba MK2555GSX | Toshiba MK3255GSX | Toshiba MK5055GSX |
| Capacity (GB) | 160 | 250 | 320 | 500 |
| Bytes per sector | 512 | 512 | 512 | 512 |
| Data heads | 2 | 2 | 4 | 4 |
| Drive Format | | | | |
| Disks | 1 | 1 | 2 | 2 |
| Spindle speed (RPM) | 5400 | | | |
| Performance Specifications | | | | |
| Buffer size | 8MB | | | |
| Interface | SATA | | | |
| Internal transfer rate (Mbits/sec, max) | 363 ~ 952 typical | | | |
| I/O data transfer rate (Mbytes/sec max) | 300 | | | |
| DC Power Requirements | | | | |
| Voltage | 5V ±5% | | | |

| Item | Specifications | | | |
|---|---|---|---|---|
| Vendor & Model Name | Western Digital WD1600BEVT-22ZCTO | Western Digital WD2500BEVT-22ZCT0 | Western Digital WD3200BEVT-22ZCT0 | Western Digital WD5000BEVT-22ZAT0 |
| Capacity (GB) | 160 | 250 | 320 | 500 |
| Bytes per sector | 512 | | | |
| Data heads | 2 | 4 | 3 | 4 |

| Item | Specifications | | | |
|---|---|---|---|---|
| Drive Format | | | | |
| Disks | 1 | 2 | 2 | 2 |
| Spindle speed (RPM) | 5400 | | | |
| Performance Specifications | | | | |
| Buffer size | 8 MB | | | |
| Interface | SATA | | | |
| Internal transfer rate (Mbits/sec, max) | N/A | | | |
| I/O data transfer rate (Mbytes/sec max) | 300 | | | |
| DC Power Requirements | | | | |
| Voltage | 5V ±5% | | | |

**BIOS**

| Item | Specification |
|---|---|
| BIOS vendor | Insyde |
| BIOS ROM type | W25X16AVSSIG |
| BIOS ROM size | 16Mb |
| BIOS package | 8 PIN SOIC |
| Supported Protocols | SPI |
| BIOS password control | Set by setup manual |

**LCD 11.6”**

| Item | Specifications | | | |
|---|---|---|---|---|
| Vendor/model name | AUO B116XW02 | Chi Mei N116B6-L02 | LG LP116WH1 | Samsung LTN116AT01-A01 |
| Screen Diagonal (mm) | 293.83 | | | |
| Active Area (mm) | 256.125 (H) x 144.00 (V) | | | |
| Display resolution (pixels) | 1366x3(RGB) x 768 | | | |
| Pixel Pitch (mm) | 0.1875 x 0.1875 | | | 0.2265(H) x 0.2265(V) |
| Typical White Luminance (cd/$m^2$) also called Brightness | 200 typ. (5 points average) | | | |
| Contrast Ratio | 500:1 typ | | | |
| Response Time (Optical Rise Time/Fall Time) msec | 8 typ / 16 Max | 8 typ / 16 Max | 9 typ / 16 max | 16 typ / 25 max |
| Typical Power Consumption (watt) | 4.0 max. (Include Logic and Blu power) | N/A | 3.18 W Typ. | N/A |
| Weight (without inverter) | 255g max. | 240g max | 255g max. | |
| Physical Size (mm) | 268L x 161.5W x 5.0T | | | |

| Item | Specifications | | | |
|---|---|---|---|---|
| Electrical Interface | 1 channel LVDS | 3.3V LVDS | LVDS | LVDS |
| Viewing Angle (degree)<br>Horizontal (Right) / (Left)<br>Vertical (Upper) / (Lower) | <br>45/45<br>10/30 | <br>45/45<br>20/45 | <br>30/30<br>10/20 | <br>45/45<br>15/35 |

**Bluetooth**

| Item | Specification |
|---|---|
| Bluetooth Controller | Foxconn T60H928.33 |
| Features | • Fully Qualified Bluetooth v2.1 with Class 2 specification RF output power.<br>• Enhanced Data Rate (EDR) compliant.<br>• Full Piconet and Scatternet operation.<br>• Integrated PIFA Antenna with better RF performance.<br>• USB 2.0 compliant interface.<br>• F/W upgradable via Flash downloads.<br>• Very low power consumption.<br>• Support Coexistence with Intel WCS (Wireless Coexistence System) & AFH (Adaptive Frequency Hopping) |
| Radio Technology | FHSS |
| Operating Frequency | 2.402GHz ~ 2.480GHz |
| Channel Numbers | 79 channels with 1MHz BW |
| Transmitter Output Power | -6~4dBm output power for BT class 2 operation |
| Coverage | 10m (Varies depending on operating environment) |
| Receiver Sensitivity | -75dBm, BER<0.1% |
| Maximum Receiver Signal | -10dBm |
| Operating Voltage | 3.3V+/-0.3V |
| Working Temperature | Operating temp: 0 °C to +70 °C (+32 °F to +158 °F)<br>Non-operating temp: -10 °C to +75°C (+14 °F to +167 °F) |
| Interface | USB2.0 with JST SM08B-SURS-TF connector |
| Weight | 1.75g |

**Audio Interface**

| Item | Specification |
|---|---|
| Codec Controller | Realtek ALC269X |
| Compatibility | • Headphone-out<br>• S/PDIF, Line-In and Microphone-In.<br>• 2 stereo ADCs support 16/20/24-bit PCM format recording simultaneously. |
| Sampling Rate | • All DACs supports 16/20/24-bit, 44.1k/48k/96k/192kHz sample rate.<br>• Two independent S/PDIF-OUT converters support 16/20/24-bit, 44.1k/48k/88.2k/96k/192kHz sample rate. One for normal S/PDIF output, the other one output an independent digital stream to HDMI transmitter. |
| Internal Microphone | • Digital MICRO PHONE ZK2(HFM-M101-006-L19-G)<br>• Digital MICRO PHONE ZK2(A-OA2408FM-018) |
| Internal Speakers | • Two Med-High Speakers (1W/4Ù) |

**LAN Interface**

| Item | Specification |
|---|---|
| LAN Chipset | Atheros AR8131L |
| Package | 48pin QFN |
| Features | • It is an ultra-high performance, ultralow cost, and ultra-low power fully integrated 10/100/1000 Mbps NIC/LOM Ethernet.<br>• The AR8131L combines a 10/100/1000BASE-T GbE media access controller (MAC), a triplespeed Ethernet physical layer transceiver (PHY), and a PCI Express bus interface.<br>• The AR8131L is compliant with IEEE 802.3u specification for 10/100 Mbps Ethernet and IEEE 802.3ab specification for 1000 Mbps Ethernet.<br>• The AR8131L device combines pulse shaping, Tx/Rx PCS, echo canceller, NEXT canceller, equalizer, decoder, and timing recovery functions to deliver robust signal performance in noisy environments.<br>• The AR8131L GbE controller supports checksum off-load features for IP, TCP, and UDP, lowering CPU utilization and optimizing network performance. |

**Keyboard**

| Item | Specification |
|---|---|
| Keyboard Controller | Winbond WPCE775LA0DG |
| Total number of keypads | US: 86<br>UK: 86<br>UI: 86<br>GERMAN: 86 |
| Windows logo key | Yes |
| Internal & external keyboard work simultaneously | Plug USB keyboard to the USB port directly: Yes |
| Features | • Plug USB keyboard to the USB port directly: Yes |

**Media Card Reader**

| Item | Specification |
|---|---|
| Chipset | Alcor AU6433 |
| Features | • Fully compatible with USB2.0 High Speed and backward compatible with USB1.1 specifications<br>• Supports multiple flash card interfaces, including SD/ MMC/xD/MS.<br>• Supports single LUN<br>• 48-pin LQFP |

| Item | Specification |
|---|---|
| Compliance | • Complies with USB Device Class Definition for Mass Storage and Bulk-Transport V1.0<br>• Complies with Secure Digital Card (SD) specification up to ver. 2.0(SDHC)<br>• Complies with MultiMedia Card (MMC) specification up to ver. 4.2<br>• Complies with Memory Stick (MS) specification up to ver. 1.43<br>• Complies with Memory Stick PRO (MS_Pro) specification up to ver. 1.03<br>• Complies with Memory Stick PRO-HG (MS PRO-HG) specification up to ver. 1.01<br>• Complies with Memory Stick Interface Guideline for PC peripheral devices with Memory Stick Slot ver. 1.16-00<br>• Complies with xD-Picture Card (xD) specification up to version 1.2 |
| Interface | • USB 2.0 |
| Power | • 3.3V |

**Camera**

| Item | Specifications | | |
|---|---|---|---|
| Vendor and model | Chicony CNF9011/9048 | Lite-on 09P2SF001 | Suyin CN0316-S30C-OV06-1 |
| Interface | USB 2.0 | | |
| Optical aperture | N/A | | |
| Focusing range | 17.4 cm - infinity | 19 CM - infinity | 40 CM - infinity |
| Dimensions (L x W x H mm) | 68 X 8 X 3.64 mm | 68 X 8 X 3.84 mm | 65 X 7.9 X 3.8 mm |
| Sensor type | CMOS | | |
| Pixel resolution | 640X480 | | |

**Wireless LAN**

| Item | Specification | Specification | Specification | Specification |
|---|---|---|---|---|
| Manufacturer | Foxconn | Foxconn | Intel | Intel |
| Type | Atheros AR9283 | T77H121.01 | WiFi Link 1000 | Shirley Peak |
| PHY Mode Supported | b,g,n. | b,g,n. | b, g, n. | a, b, g, n. |

| Item | Specification | Specification |
|---|---|---|
| Manufacturer | Intel | Lite-on |
| Type | Wifi Link 5000 | Atheros AR5B93 |
| PHY Modes Supported | a, b, g, n. | b, g, n. |

**3G Module**

| Item | Specifications |
|---|---|
| 3G Module | • Qualcomm Gobi1000<br>• Huawei EM770W |
| Technical Standard | GSM / GPRS/ EGPRS MSC 12 / DTM Item/ WCDMA R5 / HSDPA 7.2Mbps / HSUPA 5.76Mbps |

| Item | Specifications |
|---|---|
| Interface | USB 2.0 |
| Antenna | 1 x 2 |

**Embedded Controller**

| Item | Specifications |
|---|---|
| Chipset | Winbond WPCE775LA0DG |
| Features | • Shared SPI BIOS flash memory with page programming support.<br>• High-accuracy, high-speed ADC.<br>• Up to 95 GPIO ports (including keyboard scanning) with a variety of wake-up events (up to 42 wake-up inputs).<br>• 16-bit RISC core, with up to 4 Mbytes of external address space, running at up to 25 MHz.<br>• 128-pin LQChipFP |

**Battery**

| Item | Specifications |
|---|---|
| | 6 Cell |
| Vendor & model name | SIMPLO UM09F70 3S2P<br>SANYO UM09F36 3S2P |
| Battery Type | Li-ion |
| Pack capacity | SANYO 6 cell 5600mAh<br>SAMSUNG 6 cell 5600mAh<br>LGC 6 cell 5600mAh |
| Number of battery cell | 6 |
| Package configuration | 3 cells in series, 2 series in parallel |
| Normal voltage | 11.1 |
| Charge voltage | 12.6 |

# System Utilities

## BIOS Setup Utility

The BIOS Setup Utility is a hardware configuration program built into your computer's BIOS (Basic Input/ Output System).

Your computer is already properly configured and optimized, and you do not need to run this utility. However, if you encounter configuration problems, you may need to run Setup. Please also refer to Chapter 4 Troubleshooting when problem arises.

To activate the BIOS Utility, press **F2** during POST (when **Press <F2> to enter Setup** message is prompted on the bottom of screen).

Press **F2** to enter setup. The default parameter of F12 Boot Menu is set to "disabled". If you want to change boot device without entering BIOS Setup Utility, please set the parameter to "enabled".

Press **<F12>** during POST to enter multi-boot menu. In this menu, user can change boot device without entering BIOS SETUP Utility.

## Navigating the BIOS Utility

There are six menu options: Information, Main, Advanced, Security, Power, Boot, and Exit.

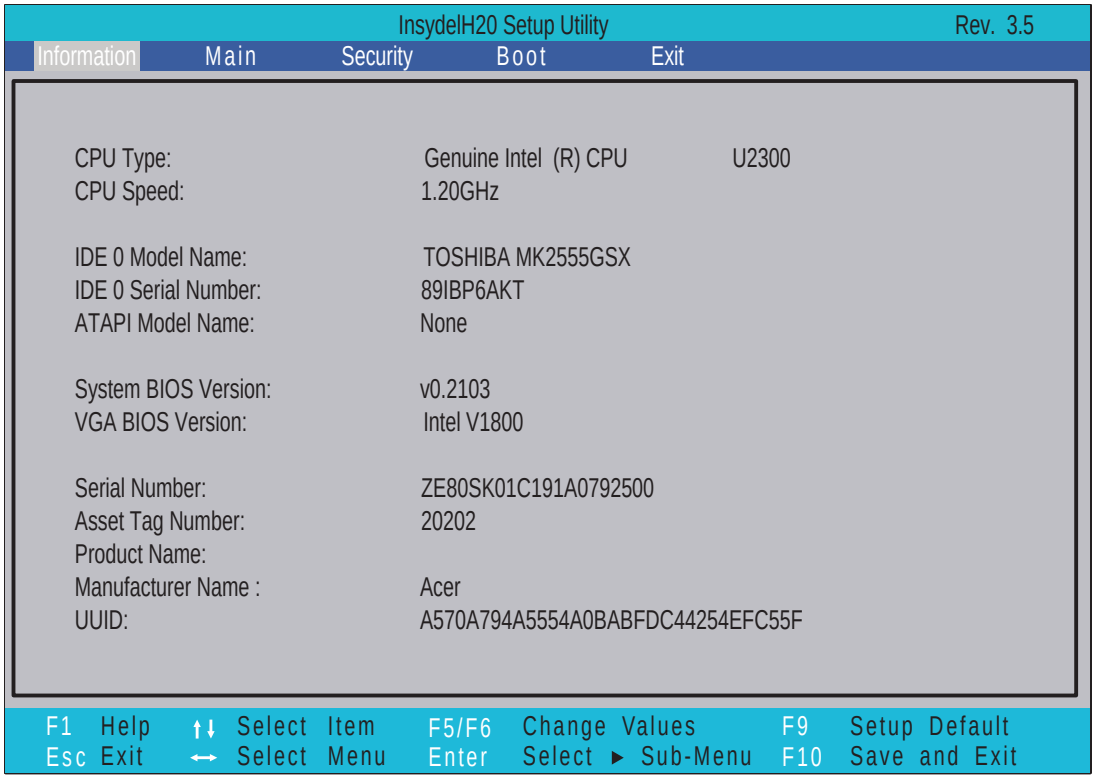
Follow these instructions:

- To choose a menu, use the left and right arrow keys.
- To choose an item, use the up and down arrow keys.
- To change the value of a parameter, press **F5** or **F6**.
- A plus sign (+) indicates the item has sub-items. Press **Enter** to expand this item.
- Press **Esc** while you are in any of the menu options to go to the Exit menu.
- In any menu, you can load default settings by pressing **F9**. You can also press **F10** to save any changes made and exit the BIOS Setup Utility.

**NOTE:** You can change the value of a parameter if it is enclosed in square brackets. Navigation keys for a particular menu are shown on the bottom of the screen. Help for parameters are found in the Item Specific Help part of the screen. Read this carefully when making changes to parameter values. **Please note that system information is subject to different models**.

# Information

The Information screen displays a summary of your computer hardware information.

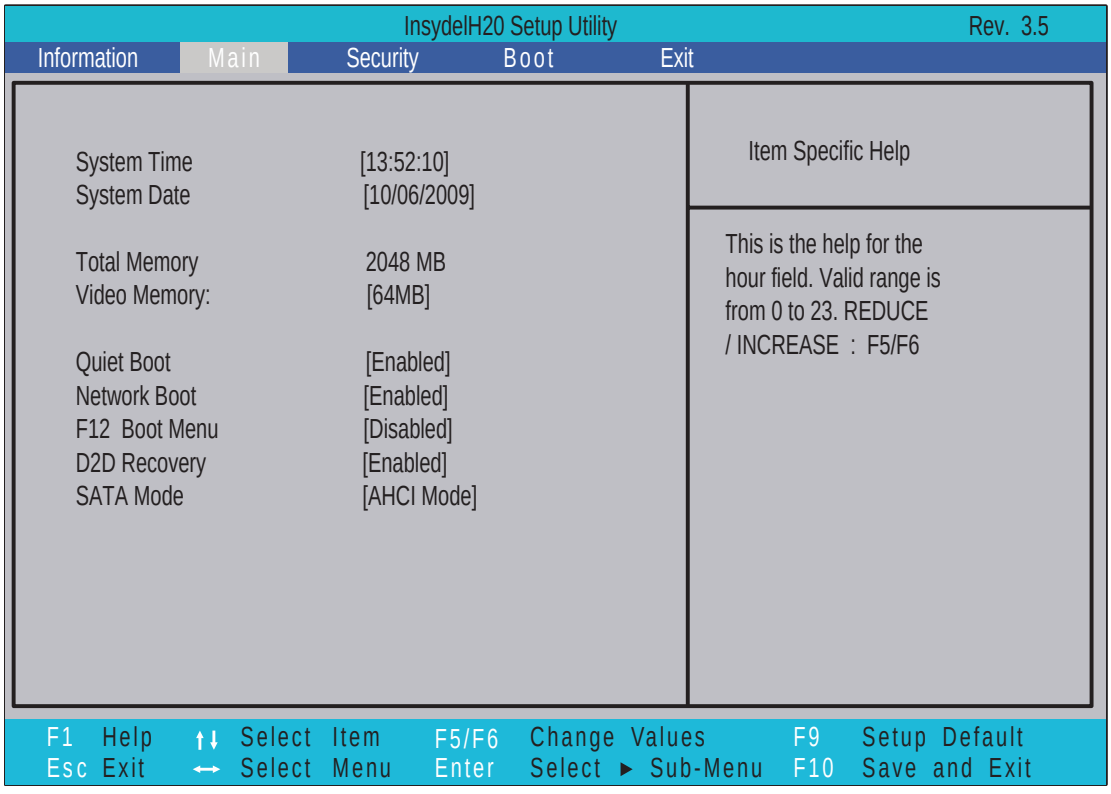



**NOTE:** The system information is subject to different models.

| Parameter | Description |
|---|---|
| CPU Type | This field shows the CPU type and speed of the system. |
| CPU Speed | This field shows the speed of the CPU. |
| HDD Model Name | This field shows the model name of HDD installed on primary IDE master. |
| HDD Serial Number | This field displays the serial number of HDD installed on primary IDE master. |
| ATAPI Model Name | This field displays the model name of the installed ODD drive. |
| System BIOS Version | Displays system BIOS version. |
| VGA BIOS Version | This field displays the VGA firmware version of the system. |
| Serial Number | This field displays the serial number of this unit. |
| Asset Tag Number | This field displays the asset tag number of the system. |
| Product Name | This field shows product name of the system. |
| Manufacturer Name | This field displays the manufacturer of this system. |
| UUID Number | Universally Unique Identifier (UUID) is an identifier standard used in software construction, standardized by the Open Software Foundation (OSF) as part of the Distributed Computing Environment (DCE). |

# Main

The Main screen allows the user to set the system time and date as well as enable and disable boot option and recovery.



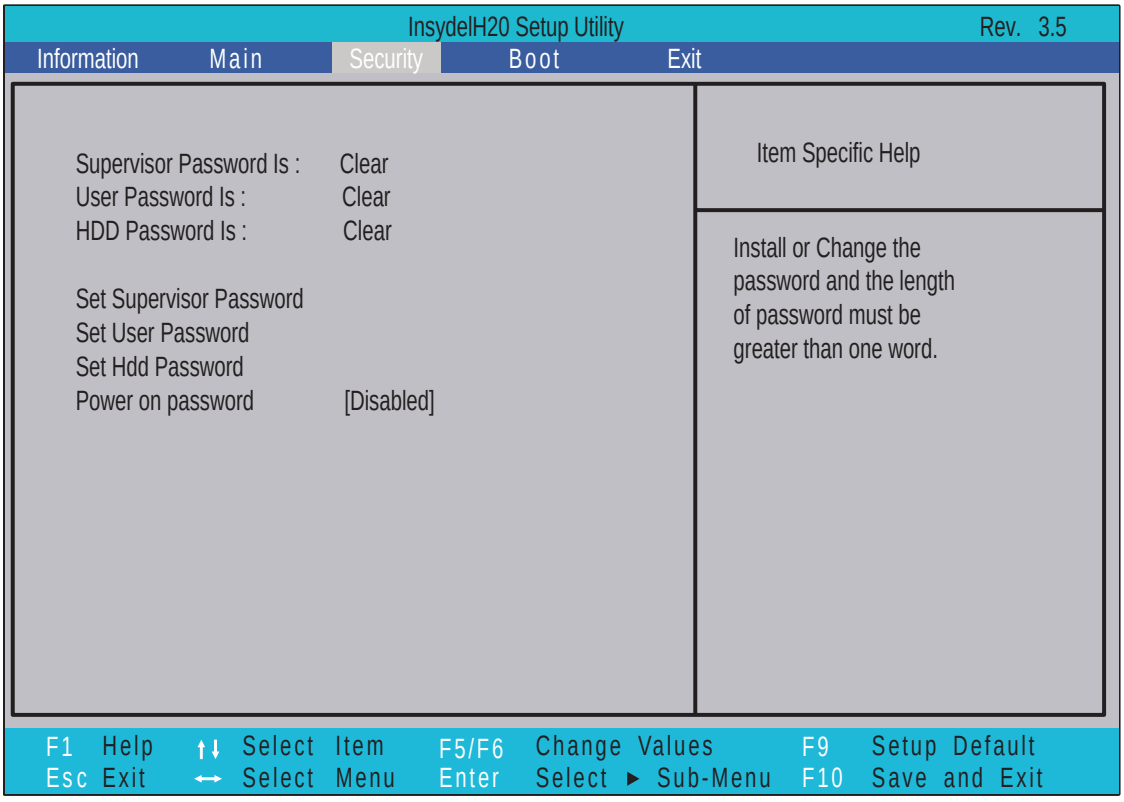

**NOTE:** The screen above is for your reference only. Actual values may differ.

The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

| Parameter | Description | Format/Option |
|---|---|---|
| System Time | Sets the system time. The hours are displayed with 24-hour format. | Format: HH:MM:SS (hour:minute:second) |
| System Date | Sets the system date. | Format MM/DD/YYYY (month/day/year) |
| Total Memory | This field reports the memory size of the system. Memory size is fixed to 2048 MB. | N/A |
| Video Memory | Shows the video memory size. VGA Memory size=32 MB | N/A |
| Quick Boot | Allows startup to skip certain tests while booting, decreasing the time needed to boot the system. | Option: **Enabled** or Disabled |
| Network Boot | Enables, disables the system boot from LAN (remote server). | Option: **Enabled** or Disabled |
| F12 Boot Menu | Enables, disables Boot Menu during POST. | Option: **Enabled** or Enabled |
| D2D Recovery | Enables, disables D2D Recovery function. The function allows the user to create a hidden partition on hard disc drive to store operation system and restore the system to factory defaults. | Option: **Enabled** or Disabled |
| SATA Mode | Control the mode in which the SATA controller should operate. | Option: **AHCI** or IDE |

# Security

The Security screen contains parameters that help safeguard and protect your computer from unauthorized use.


InsydeH20 Setup Utility
Rev. 3.5
Information
Main
Security
Boot
Exit
Supervisor Password Is : Clear
User Password Is : Clear
HDD Password Is : Clear
Set Supervisor Password
Set User Password
Set Hdd Password
Power on password [Disabled]
Item Specific Help
Install or Change the password and the length of password must be greater than one word.
F1 Help ↑↓ Select Item F5/F6 Change Values F9 Setup Default
Esc Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

| Parameter | Description | Option |
|---|---|---|
| Supervisor Password Is | Shows the setting of the Supervisor password | **Clear** or Set |
| User Password Is | Shows the setting of the user password. | **Clear** or Set |
| Set Supervisor Password | Press Enter to set the supervisor password. When set, this password protects the BIOS Setup Utility from unauthorized access. The user can not either enter the Setup menu nor change the value of parameters. | |
| Set User Password | Press Enter to set the user password. When user password is set, this password protects the BIOS Setup Utility from unauthorized access. The user can enter Setup menu only and does not have right to change the value of parameters. | |
| Set Hdd Password | Enter HDD password. | |
| Power on password | Defines whether a password is required or not while the events defined in this group happened. The following sub-options are all requires the Supervisor password for changes and should be grayed out if the user password was used to enter setup. | **Enabled** or Disabled |

**NOTE:** When you are prompted to enter a password, you have three tries before the system halts. Don't forget your password. If you forget your password, you may have to return your notebook computer to your dealer to reset it.

## Setting a Password

Follow these steps as you set the user or the supervisor password:

1. Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the **Enter** key. The Set Supervisor Password box appears:

2. Type a password in the “Enter New Password” field. The password length can not exceeds 8 alphanumeric characters (A-Z, a-z, 0-9, not case sensitive). Retype the password in the “Confirm New Password” field.

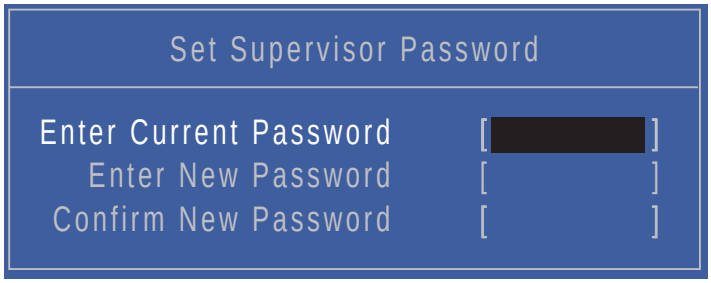
**IMPORTANT:**Be very careful when typing your password because the characters do not appear on the screen.

3. Press **Enter**. After setting the password, the computer sets the User Password parameter to “Set”.
4. If desired, you can opt to enable the Password on boot parameter.
5. When you are done, press F10 to save the changes and exit the BIOS Setup Utility.

## Removing a Password

Follow these steps:

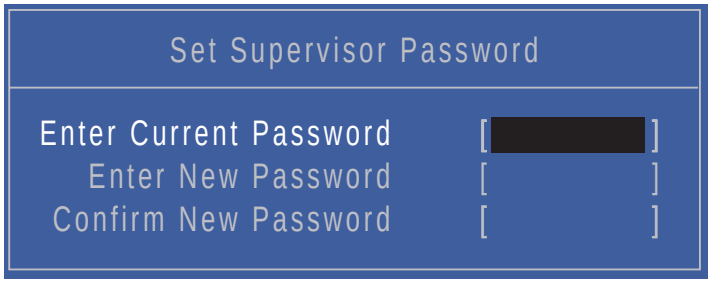
1. Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the **Enter** key. The Set Password box appears:




2. Type the current password in the Enter Current Password field and press **Enter**.
3. Press **Enter** twice **without** typing anything in the Enter New Password and Confirm New Password fields. The computer then sets the Supervisor Password parameter to “Clear”.
4. When you have changed the settings, press u to save the changes and exit the BIOS Setup Utility.

## Changing a Password

1. Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the **Enter** key. The Set Password box appears.




2. Type the current password in the Enter Current Password field and press **Enter**.
3. Type a password in the Enter New Password field. Retype the password in the Confirm New Password field.
4. Press **Enter**. After setting the password, the computer sets the User Password parameter to “Set”.
5. If desired, you can enable the Password on boot parameter.
6. When you are done, press **F10** to save the changes and exit the BIOS Setup Utility.

If the verification is OK, the screen will display as following.

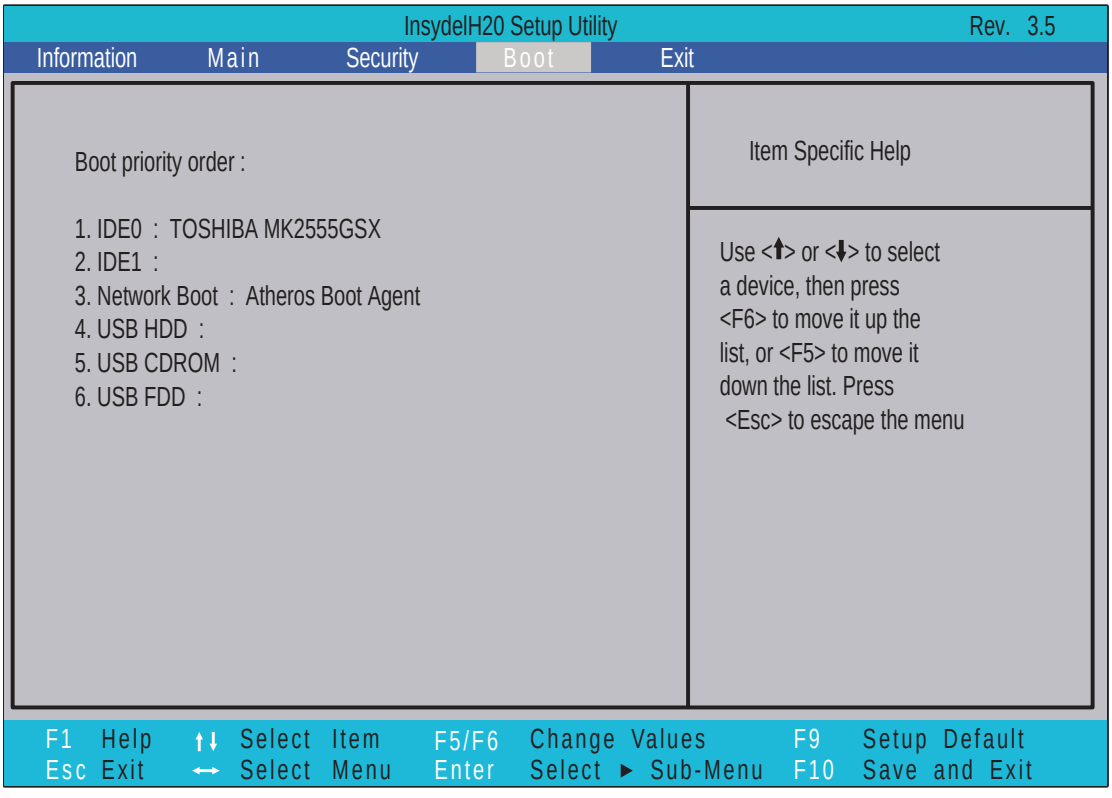
The password setting is complete after the user presses **Enter**.

If the current password entered does not match the actual current password, the screen will show you the Setup Warning.

If the new password and confirm new password strings do not match, the screen displays the following message.

# Boot

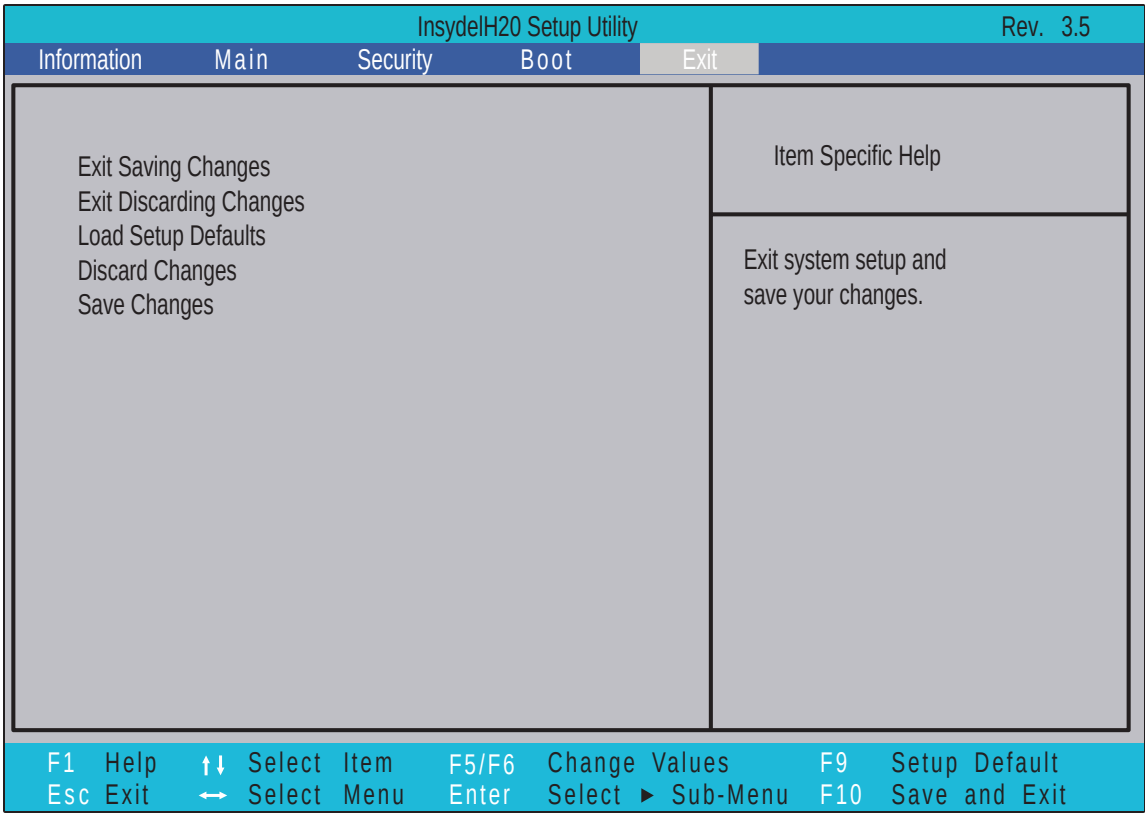
This menu allows the user to decide the order of boot devices to load the operating system. Bootable devices includes the USB diskette drives, the onboard hard disk drive and the DVD drive in the module bay.


InsydeH20 Setup Utility
Rev. 3.5
Information
Main
Security
Boot
Exit
Boot priority order :
1. IDE0 : TOSHIBA MK2555GSX
2. IDE1 :
3. Network Boot : Atheros Boot Agent
4. USB HDD :
5. USB CDROM :
6. USB FDD :
Item Specific Help
Use <↑> or <↓> to select a device, then press <F6> to move it up the list, or <F5> to move it down the list. Press <Esc> to escape the menu
F1 Help ↑↓ Select Item F5/F6 Change Values F9 Setup Default
Esc Exit ↔ Select Menu Enter Select ▸ Sub-Menu F10 Save and Exit

Follow the on-screen instructions to adjust the order in which the devices boot.

# Exit

The Exit screen allows you to save or discard any changes you made and quit the BIOS Utility.




The table below describes the parameters in this screen.

| Parameter | Description |
|---|---|
| Exit Saving Changes | Exit System Setup and save your changes to CMOS. |
| Exit Discarding Changes | Exit utility without saving setup data to CMOS. |
| Load Setup Default | Load default values for all SETUP item. |
| Discard Changes | Load previous values from CMOS for all SETUP items. |
| Save Changes | Save Setup Data to CMOS. |

# BIOS Flash Utility

The BIOS flash memory update is required for the following conditions:

- New versions of system programs
- New features or options
- Restore a BIOS when it becomes corrupted.

To run the BIOS flash utility:

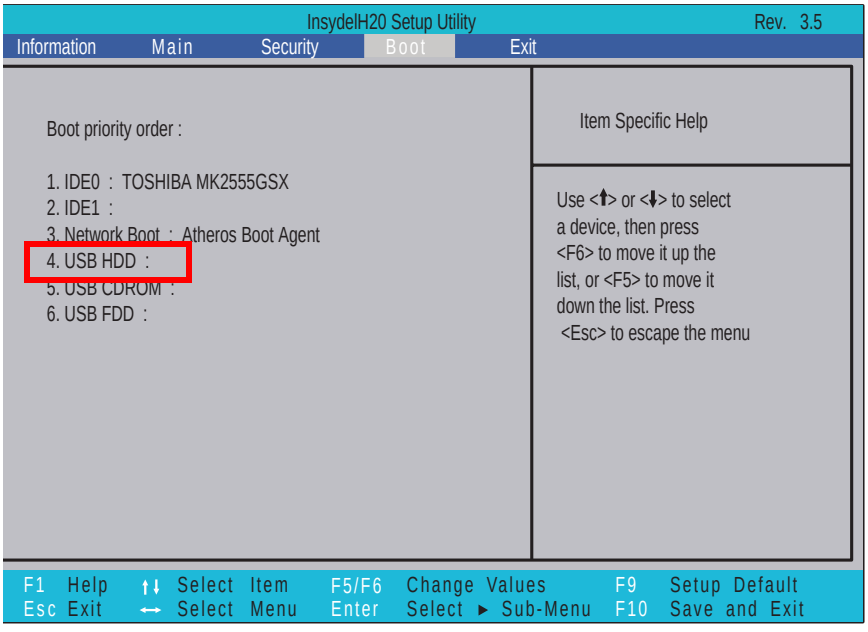
1. Copy the BIOS flash tool and the BIOS into a USB flash disk.
2. Set the computer to boot from the USB flash disk. See “Boot” on page 29.
3. On boot-up enter at the DOS prompt:

   **C:\> flashit.exe v3106.fd /dc /beep:2000**

# DOS Flash Utility

Perform the following steps to use the DOS Flash Utility:

1. Press F2 during boot to enter the Setup Menu.
2. Select **Boot Menu** to modify the boot priority order, for example, if using USB HDD to Update BIOS, move USB HDD to position 1.


InsydeH20 Setup Utility
Rev. 3.5
Information
Main
Security
Boot
Exit
Boot priority order :
1. IDE0 : TOSHIBA MK2555GSX
2. IDE1 :
3. Network Boot : Atheros Boot Agent
4. USB HDD :
5. USB CDROM :
6. USB FDD :
Item Specific Help
Use <↑> or <↓> to select a device, then press <F6> to move it up the list, or <F5> to move it down the list. Press <Esc> to escape the menu
F1 Help ↑↓ Select Item F5/F6 Change Values F9 Setup Default
Esc Exit ↔ Select Menu Enter Select ▸ Sub-Menu F10 Save and Exit

3. Execute the **FLASH.BAT** batch file to update BIOS.

The flash process begins as shown.

Insyde Flash Utility for InsydeH20
Version 1.2n
Initializing
File loading 100 %
Current BIOS Model name : JAT10
New BIOS Model name : JAT10
Current BIOS version: V0.21
New BIOS version: V0.23
Updating Block at FFFF0000

4. In flash BIOS, the message **Please do not remove AC Power Source** displays.

**NOTE:** If the AC power is not connected, the following message displays.

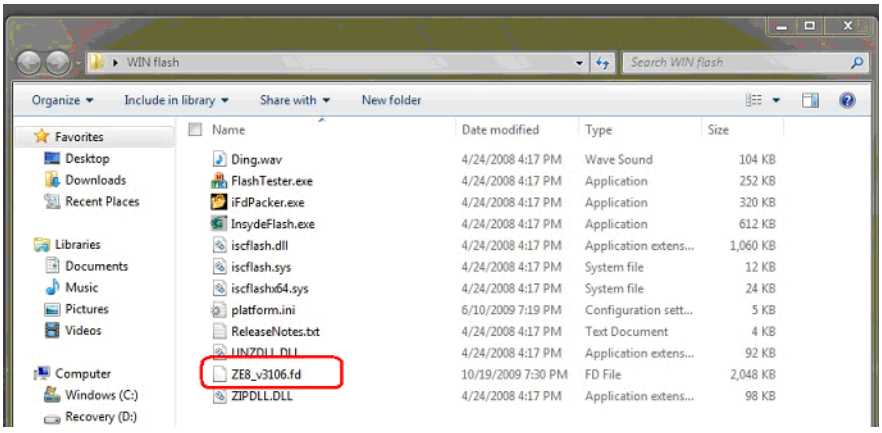
Plug in the AC power to continue.

5. Flash is complete when the message Flash programming complete displays.

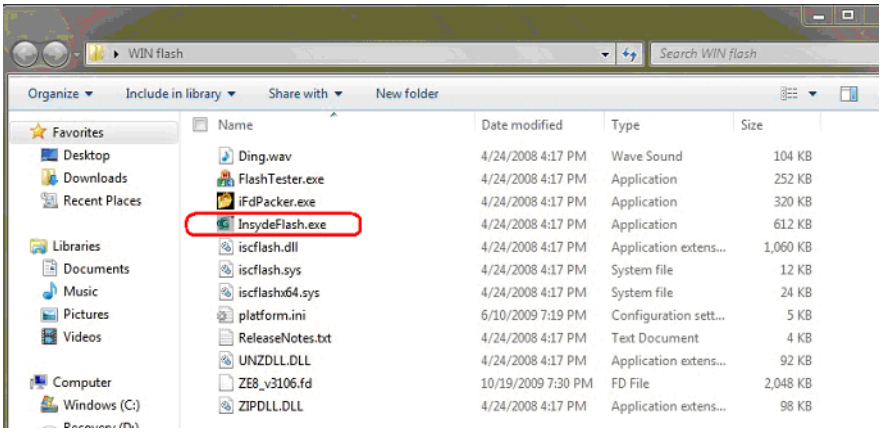
# WinFlash Utility

Perform the following steps to use the WinFlash Utility:

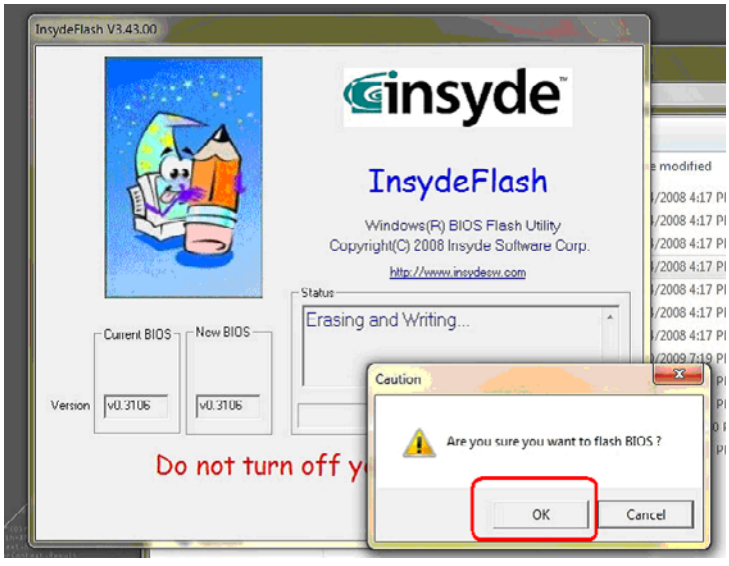
1. Put the BIOS:ZE8_v3106.fd file under WinFlash file root.




1. Double click the WinFlash executable.




2. Click **OK** to begin the update. A progress screen displays.



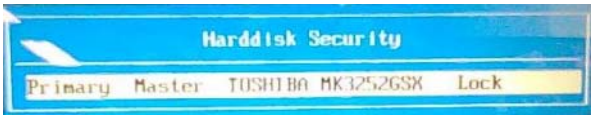

3. When the process is complete, close all programs and applications and reboot the system.

# Remove HDD/BIOS Password Utilities

This section provide you with removing HDD/BIOS method:

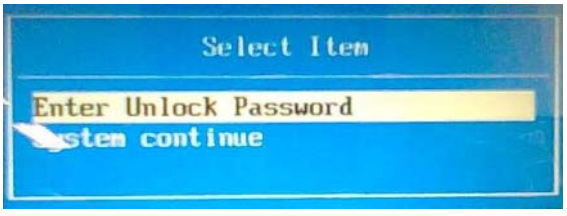
**Remove HDD Password:**

When the user keys in the wrong password three times, the system reports the following error code to user.




To unlock the HDD password, perform the following steps:

1. Press **Enter** to display the Select Item screen.



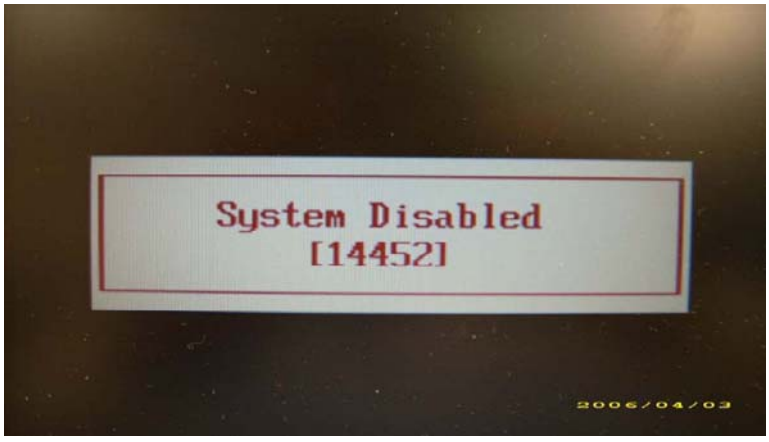

2. Select **Enter Unlock Password** and press **Enter**.

An Unlock Password displays.

3. Make a note of the key, **76943488** in the example.
4. Boot up the system to a removable bootable drive containing DOS and the UnlockHD.EXE program and open a DOS prompt. For instructions on changing boot priority see “Boot” on page 29.
5. Enter the **UnlockHD.EXE** command and input the key to create an unlock code. Make a note of the result, for example **46548274**.
6. Reboot to the hard disk and wait for the error code to reappear.
7. Press **Enter** to display the Select Item screen.
8. Select **Enter Unlock Password** and press **Enter**.
9. Enter the unlock code generated by UnlockHD.EXE.
10. Save and exit the BIOS to complete the process.

# Removing BIOS Passwords:

If you key in the wrong Supervisor Password three times, System Disabled displays on the screen. See the image below.




To reset the BIOS password, run clnpwd.exe as follows:

**1.** From a DOS prompt, Execute **clnpwd.exe**

d:\Clnpwd>clnpwd
ACER Clean Password Utility V1.00
Press 1 or 2 to clean any password shown as below
1.User Password
2.Supervisor Password
Clean User Password Successfully!

**2.** Press 1 or 2 to clean the desired password shown on the screen.

The onscreen message determines whether the function is successful or not.

# Miscellaneous Utilities

## Using Boot Sequence Selector

Boot Sequence Selector allows the boot order to be changes without accessing the BIOS. To use Boot Sequence Selector, perform the following steps:

1. Enter into DOS.
2. Execute BS.exe to display the usage screen.

```
d:\BOOTSEQ>bs

*** Boot Sequence Selecter Version 0.03 ***
Create by Rockwell Chuang 10/01/2005.

Usage:
       BS [ 1 | 2 | 3 | 4 ]

BS 1 : [ Floppy ] => [HardDisk] => [ CD-ROM ] => [  LAN   ]
BS 2 : [HardDisk] => [ CD-ROM ] => [  LAN   ] => [ Floppy ]
BS 3 : [ CD-ROM ] => [HardDisk] => [  LAN   ] => [ Floppy ]
BS 4 : [  LAN   ] => [ Floppy ] => [HardDisk] => [ CD-ROM ]

d:\BOOTSEQ>
```

3. Select the desired boot sequence by entering the corresponding sequence, for example, enter BS2 to change the boot sequence to HDD|CD ROM|LAN|Floppy.

## Using DMITools

The DMI (Desktop Management Interface) Tool copies BIOS information to eeprom to be used in the DMI pool for hardware management.

When the BIOS displays **Verifying DMI pool data** it is checking the table correlates with the hardware before sending to the operating system (Windows, etc.).

To update the DMI Pool, perform the following steps:

1. Enter into DOS.
2. Execute **dmitools.exe**. The following messages show dmitools usage:

```
*** Compal DMI String R/W Utility Ver1.40 for 2006/03/14 ***

 Usage:

   DMITOOLS [ /R | /WP | /WS | /WU ] [ STRING ]

      [/R]    : Read DMI Information from Memory
      [/WM]   : Write Manufacturer Name to EEPROM. (Max.= 16 characters)
      [/WP]   : Write Product Name to EEPROM.      (Max.= 16 characters)
      [/WS]   : Write Serial Number to EEPROM      (Max.= 22 characters)
      [/WU]   : Write UUID to EEPROM.              (Ignore String       )
      [/WA]   : Write Asset Tag to EEPROM.         (Max.= 32 characters)
```

**IMPORTANT:**The following write examples (2 to 5) require a system reboot to take effect

### Example 1: Read DMI Information from Memory

Input:

dmitools /r

Output:

Manufacturer (Type1, Offset04h): Acer

Product Name (Type1, Offset05h): Aspire one xxxxx

Serial Number (Type1, Offset07h): 01234567890123456789

UUID String (Type1, Offset08h): xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx

Asset Tag (Type3, Offset04h): Acer Asstag

### Example 2: Write Product Name to EEPROM

Input:

dmitools /wp Acer

### Example 3: Write Serial Number to EEPROM

Input:

dmitools /ws 01234567890123456789

### Example 4: Write UUID to EEPROM

Input:

dmitools /wu

### Example 5: Write Asset Tag to EEPROM

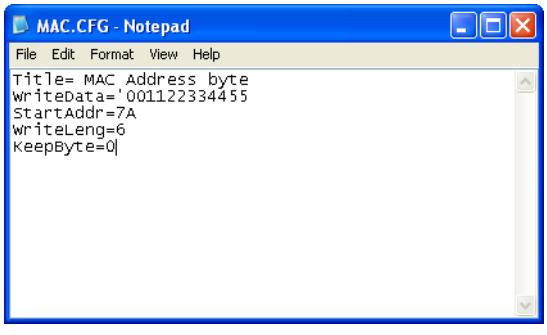
Input:

dmitools /wa Acer Asstag

## Using the LAN MAC Utility

Perform the following steps to write MAC information to eeprom:

1. Use a text editor, for example Notepad, to edit the MAC.CFG file as shown:




   - WriteData= '001122334455' <------- MAC value
   - StartAddr=7A <------- MAC address
   - WriteLeng=6 <------- MAC value length
   - KeepByte=0 <------- can be any value
2. Boot into DOS.
3. Execute **MAC.BAT** to write MAC information to eeprom.

# Machine Disassembly and Replacement

This chapter contains step-by-step procedures on how to disassemble the notebook computer for maintenance and troubleshooting.

## Disassembly Requirements

To disassemble the computer, you need the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge
- Flat screwdriver
- Philips screwdriver
- Plastic flat screwdriver
- Plastic tweezers

**NOTE:** The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatch when putting back the components.

### Related Information

The product previews seen in the disassembly procedures may not represent the final product color or configuration.

**IMPORTANT:** Cable paths and positioning may not represent the actual model. During the removal and replacement of components, ensure all available cable channels and clips are used and that the cables are replaced in the same position.

## General Information

### Pre-disassembly Instructions

Before proceeding with the disassembly procedure, make sure that you do the following:

1. Turn off the power to the system and all peripherals.
2. Unplug the AC adapter and all power and signal cables from the system.

3. Place the system on a flat, stable surface.

4. Remove the battery pack.

# Disassembly Process

The disassembly process is divided into the following sections:

- External components disassembly
- Main unit disassembly
- LCD module disassembly

The flowcharts provided in the succeeding disassembly sections illustrate the entire disassembly sequence. Observe the order of the sequence to avoid damage to any of the hardware components. For example, if you want to remove the Mainboard, you must first remove the Keyboard, and LCD Module then disassemble the inside assembly frame in that order.

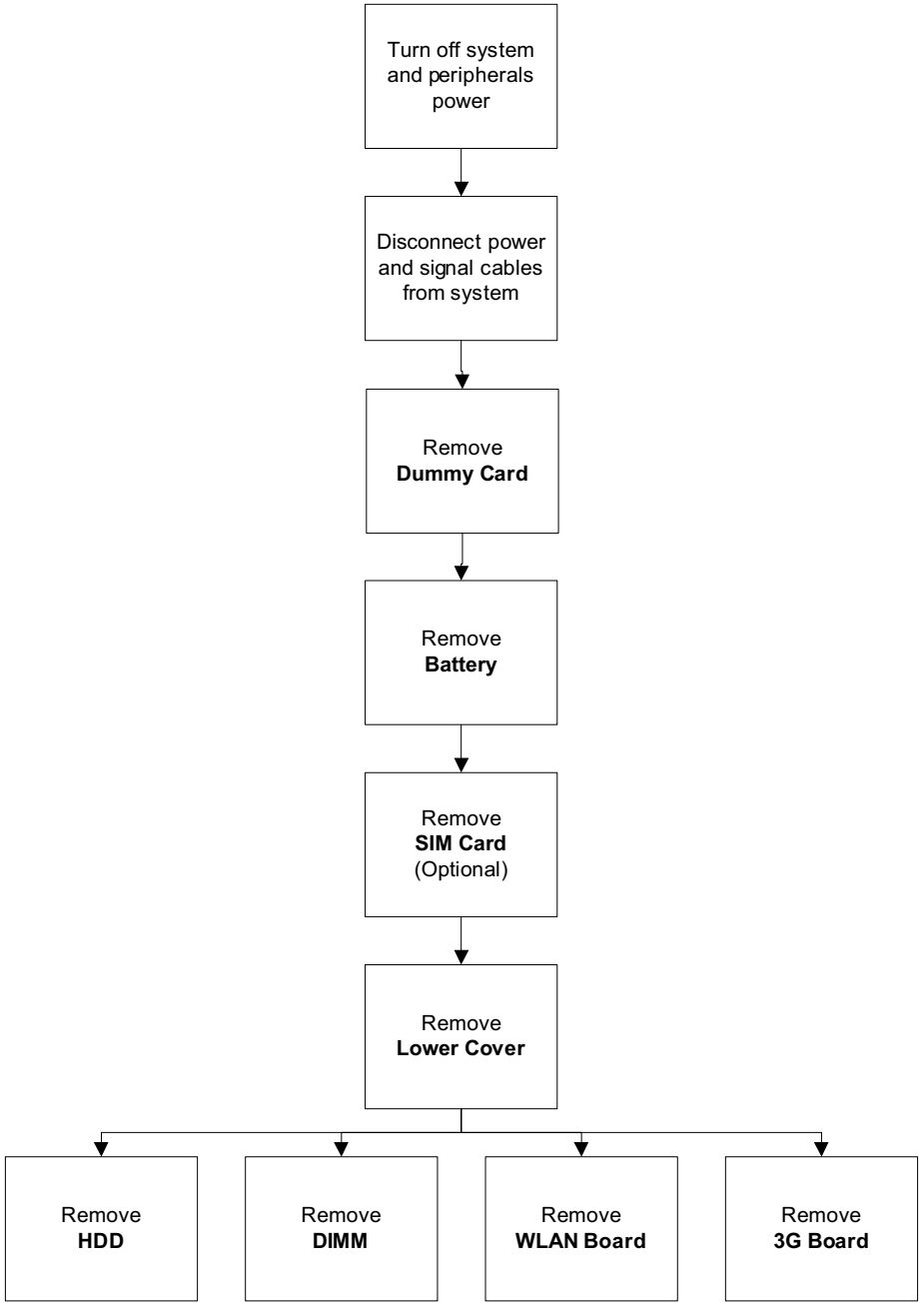
**Main Screw List**

| Screw | Quantity | Part Number |
|---|---|---|
| M2*2.5 (silver) | 8 | 86.TPK07.001 |
| M2*3 | 7 | 86.ARE07.002 |
| M2*4 | 26 | 86.W0107.003 |
| M2*5 | 24 | 86.TG607.004 |

# External Module Disassembly Process

**NOTE:** The product previews seen in the disassembly procedures may not represent the final product color or configuration.

## External Modules Disassembly Flowchart




**Screw List**

| Step | Screw | Quantity | Part No. |
|---|---|---|---|
| WLAN | M2*3 | 1 | 86.ARE07.002 |
| 3G Module | M2*3 | 1 | 86.ARE07.002 |

## Removing the Dummy Card

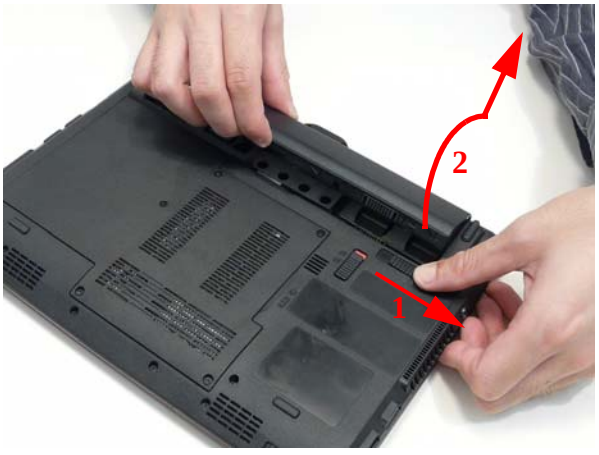
1. Press the card in to allow it to spring out.

2. Pull the dummy card out.

## Removing the Battery Pack

1. Turn the computer over.
2. Slide the battery lock/unlock latch to the unlock position.

3. Slide and hold the battery release latch to the release position (1), grasp the battery edge closest to the release latch and pull the battery up and away (2).




## Removing the SIM Card

1. See “Removing the Dummy Card” on page 42.
2. Press the SIM card in to allow it to spring out.

3. Remove the SIM card.

# Removing the Module Cover

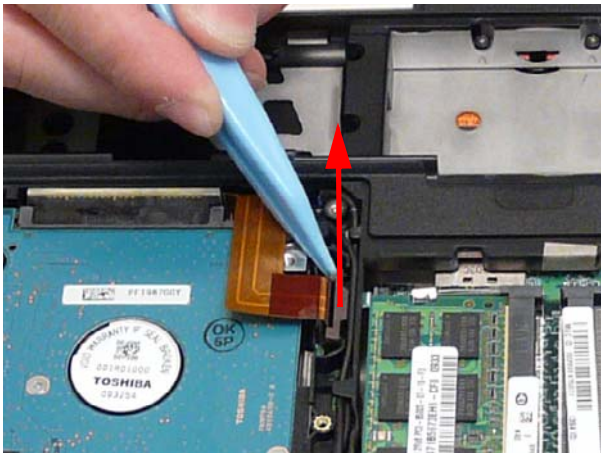
1. Loosen the six (6) captive screws.

2. Pry up the cover in the location indicated.

3. Lift the cover up and away.

# Removing the Hard Disk Drive Module

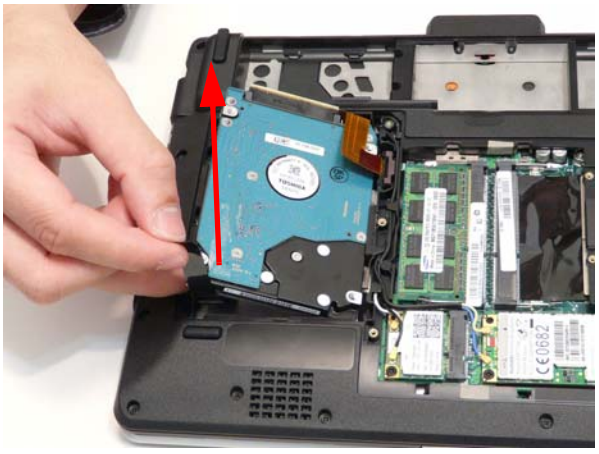
1. See “Removing the Dummy Card” on page 42.
2. See “Removing the Module Cover” on page 44.
3. Pry up the HDD FPC lock.



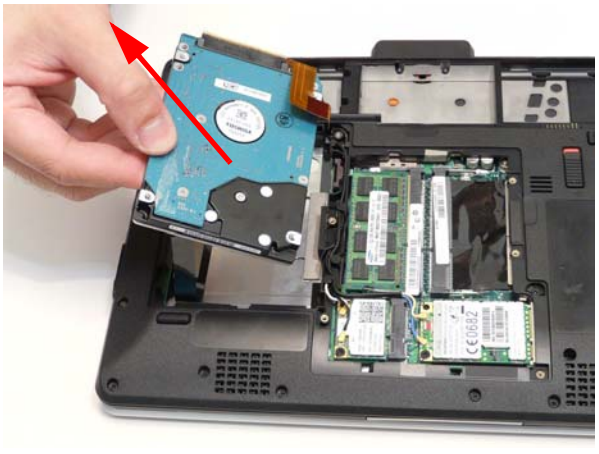

4. Lift out the HDD FPC.

5. Peel the adhesive black tape off the HDD.

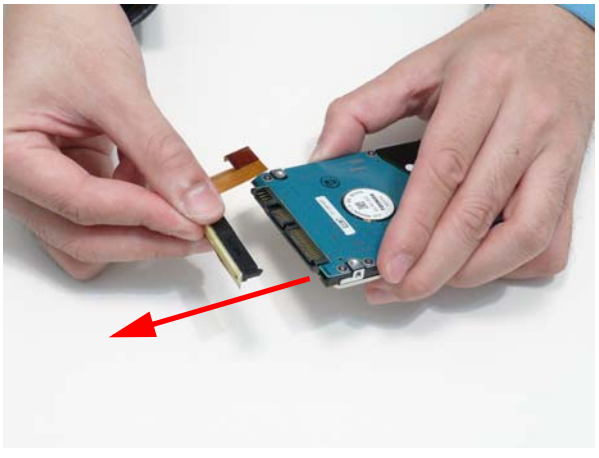
6. Grasp the black tape, pulling up the HDD.



7. Lift the HDD out of the bay.



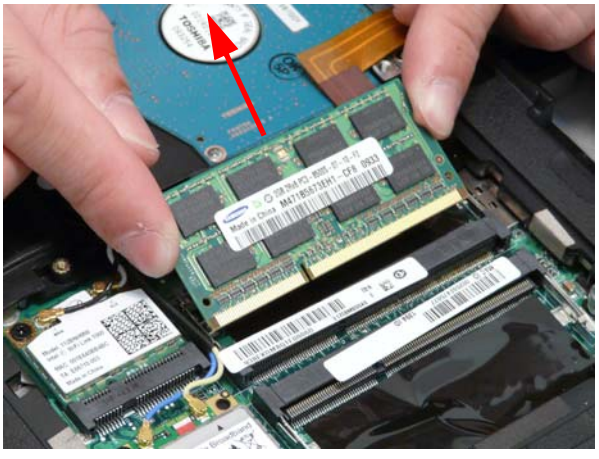
8. Remove the HDD cable from the HDD.



# Removing the DIMM Module

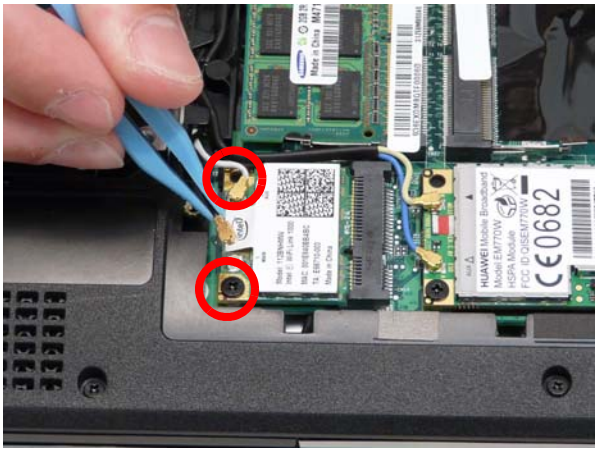
1. See “Removing the Dummy Card” on page 42.
2. See “Removing the Module Cover” on page 44.
3. Push out the release latches on both sides of the DIMM socket to release the DIMM module.

4. Lift the DIMM module out.



# Removing the WLAN Board

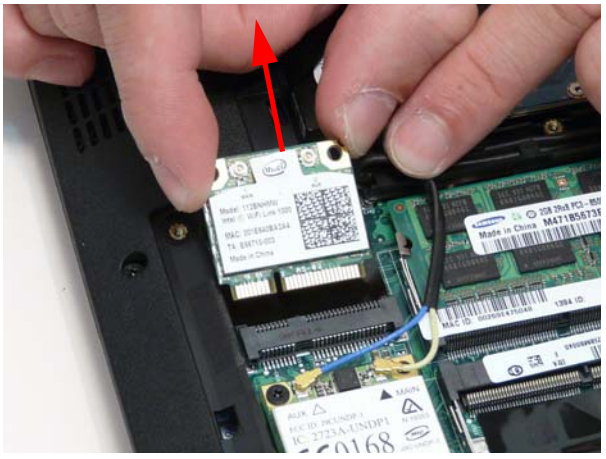
1. See “Removing the Dummy Card” on page 42.
2. See “Removing the Module Cover” on page 44.
3. Detach the two (2) cables.



4. Remove the one (1) screw.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| WLAN | M2*3 | 1 | |

5. Remove the WLAN board.



## Removing the 3G Module

1. See “Removing the Dummy Card” on page 42.
2. See “Removing the Module Cover” on page 44.
3. Detach the two cables.

4. Remove the one (1) screw.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| 3G Module | M2*3 | 1 | |

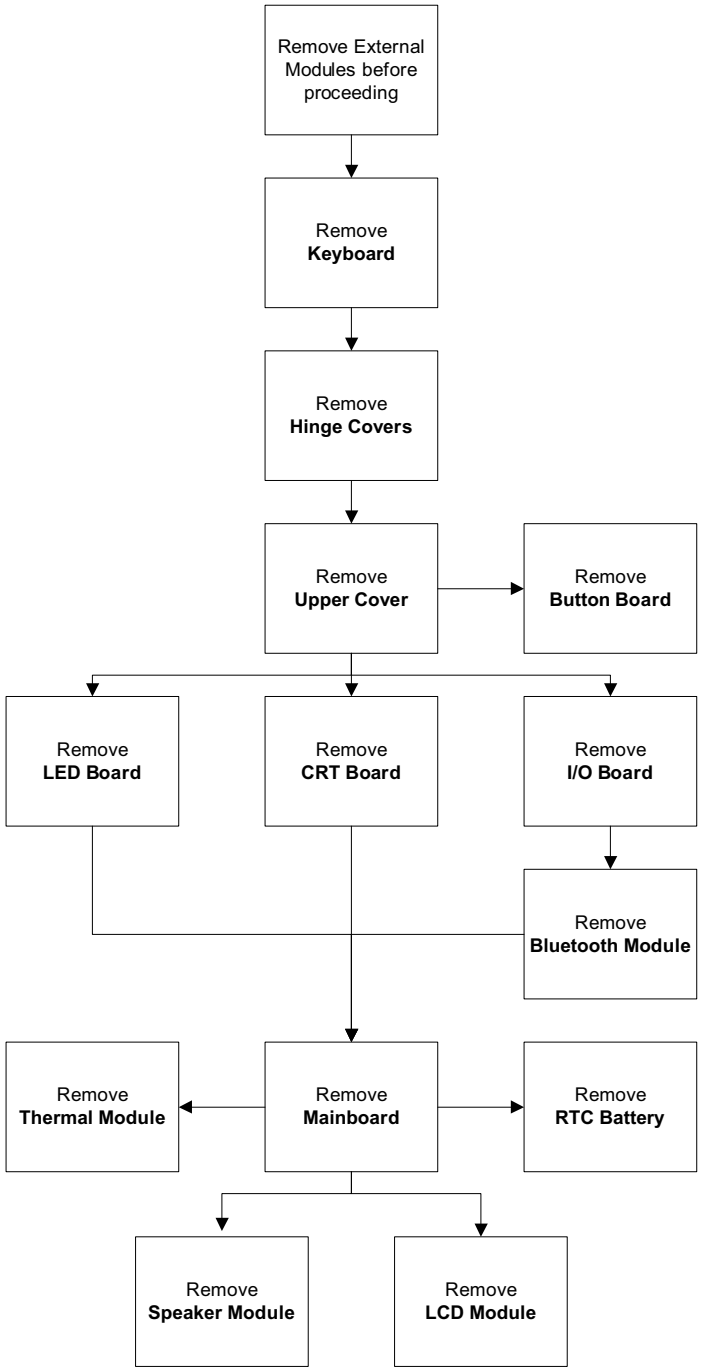
5. Remove the 3G module.

# Main Unit Disassembly Process

**IMPORTANT:** Cable paths and positioning may not represent the actual model. During the removal and replacement of components, ensure all available cable channels and clips are used and that the cables are replaced in the same position.

**NOTE:** The product previews seen in the disassembly procedures may not represent the final product color or configuration.

## Main Unit Disassembly Flowchart



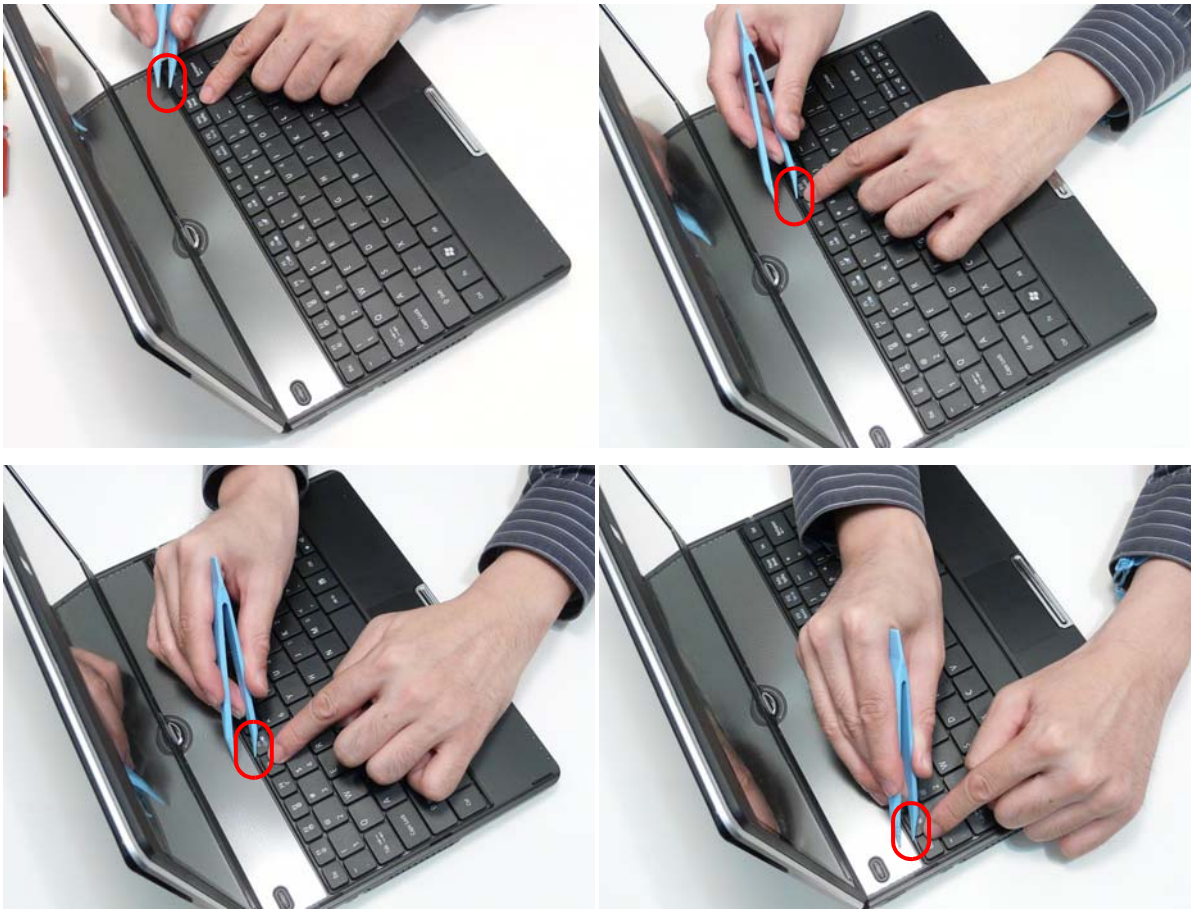
**Screw List**

| Step | Screw | Quantity | Part No. |
|---|---|---|---|
| Lower Cover | M2*5 | 16 | 86.TPK07.001 |
| | M2*4 | 6 | 86.W0107.003 |
| Upper Cover | M2*5 | 6 | 86.TPK07.001 |
| | M2*2.5 | 4 | 86.TPK07.001 |
| Hinge Cover | M2*3 | 3 | 86.ARE07.002 |
| Button Board | M2*3 | 2 | 86.ARE07.002 |
| I/O Board | M2*4 | 1 | 86.W0107.003 |
| LED Board | M2*4 | 2 | 86.W0107.003 |
| CRT Board | M2*4 | 1 | 86.W0107.003 |
| Main Board | M2*4 | 2 | 86.W0107.003 |
| Speaker | M2*3 | 2 | 86.ARE07.002 |
| LCD Module | M2*4 | 5 | 86.W0107.003 |

# Removing the Keyboard

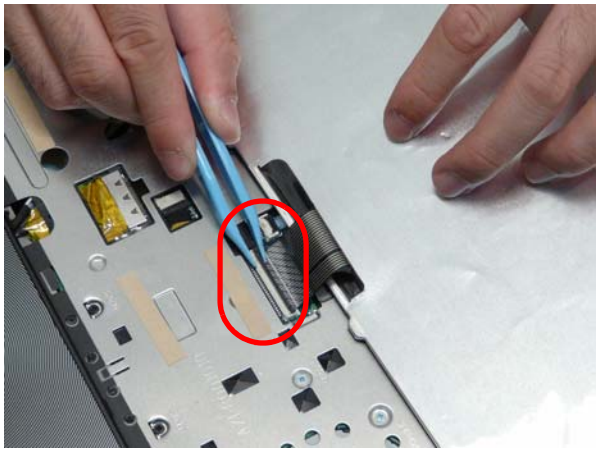
**IMPORTANT:** The keyboard is easily warped or damaged during the removal process. Take care not to use excessive force when removing the keyboard and replace if any damage occurs.

1. See “Removing the Dummy Card” on page 42.
2. Push in the four (4) latches on the top edge of the keyboard.

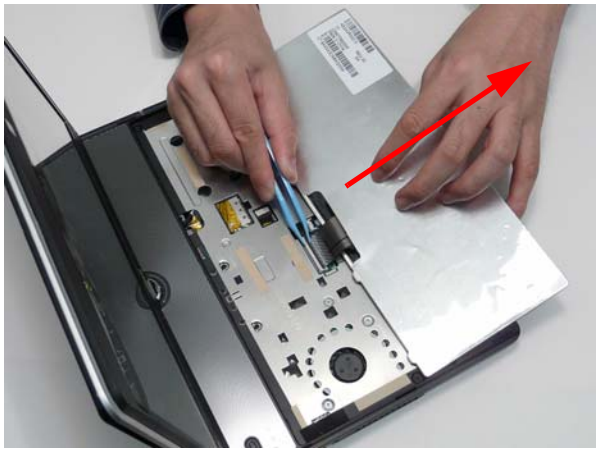


3. Lift the keyboard up and flip over.

4. Unlock the FPC.



5. Remove the FPC and keyboard.

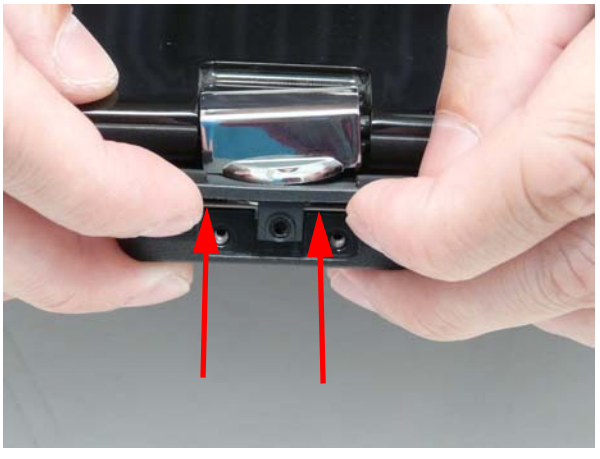


# Removing the Hinge Covers

1. Remove the three (3) screws.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Hinge Covers | M2*3 | 3 | |

2. Push up on the hinge bezel firmly to loosen the hinge cap.



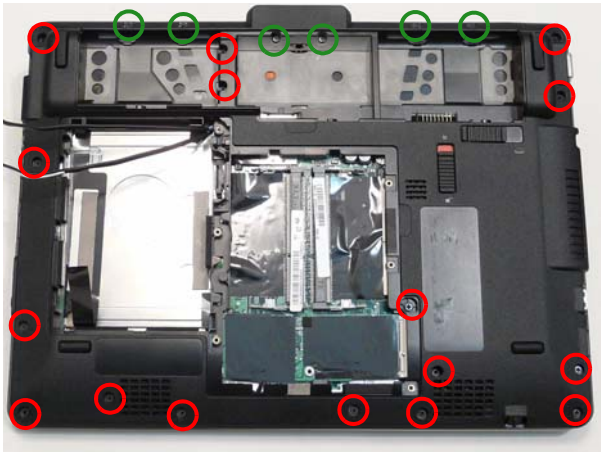
3. Lift the LCD module to a partially open position.

4. Remove the hinge cap.

5. Remove the hinge bezel.

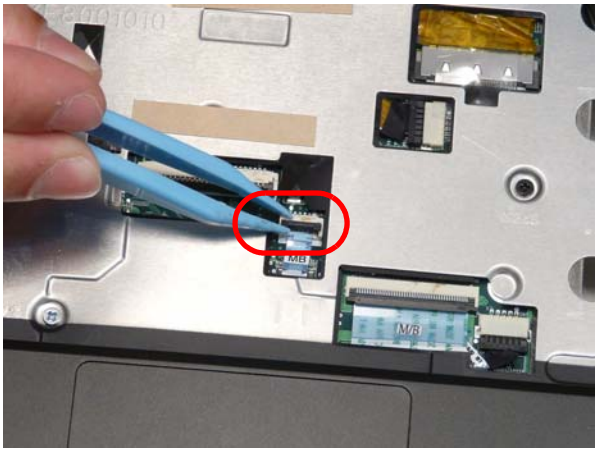
# Removing the Upper Cover

1. See “Removing the Keyboard” on page 53.
2. See “Removing the Hinge Covers” on page 55.
3. Remove the twenty-two (22) screws in the lower cover.

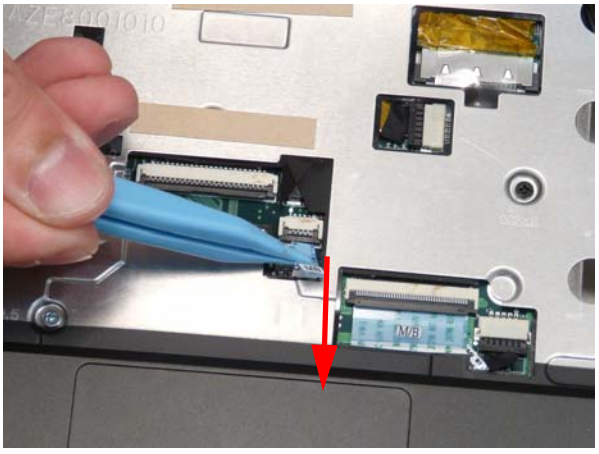


| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Lower Cover | M2*5 (Red Call Out) | 16 | |
| | M2*4 (Green Call Out) | 6 | |

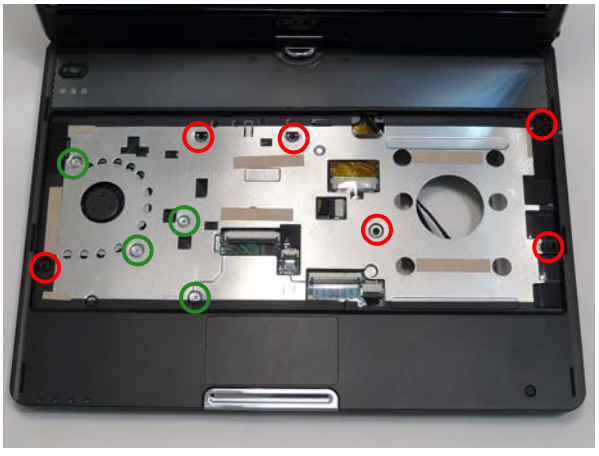
4. Flip the computer over and unlock the button board cable.



5. Disconnect the button board cable.



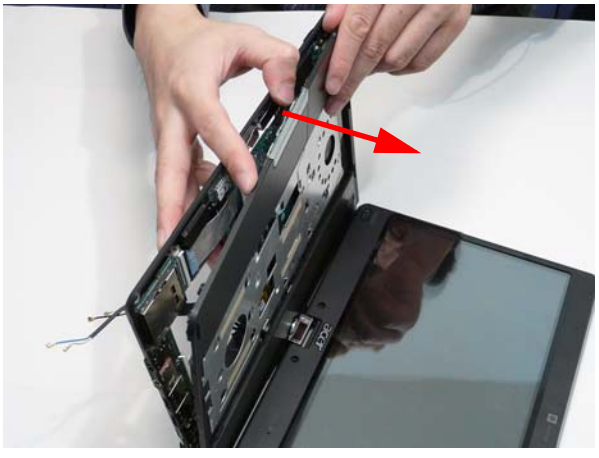
6. Remove the ten (10) screws in the upper cover.



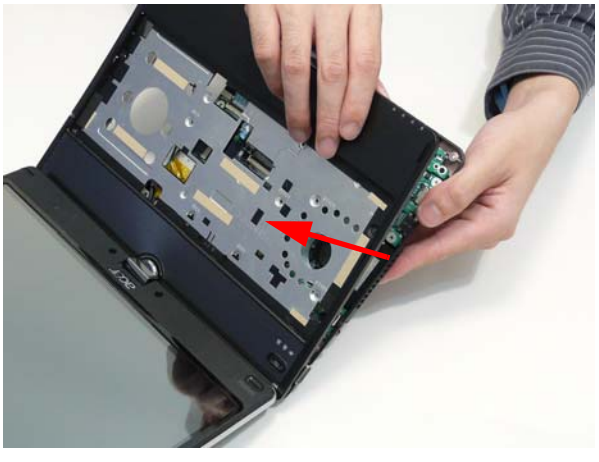
| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Upper Cover | M2*5 (Red Call Out) | 6 | |
| | M2*2.5 (Green Call Out) | 4 | |

7. Pry the upper and lower covers apart at the location shown.

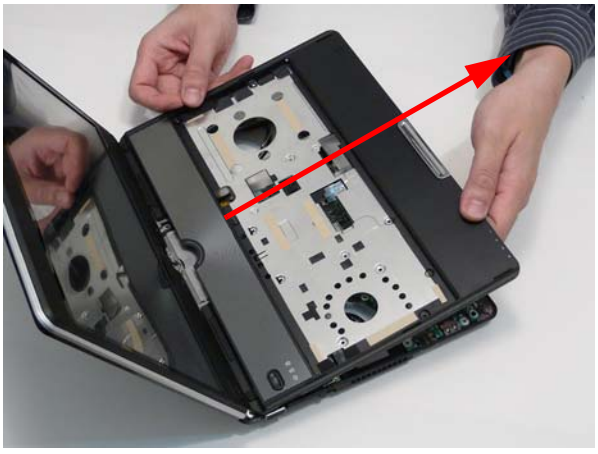
8. Pry the front side open.



9. Pry the left side open.



**10.** Pull the upper cover away.

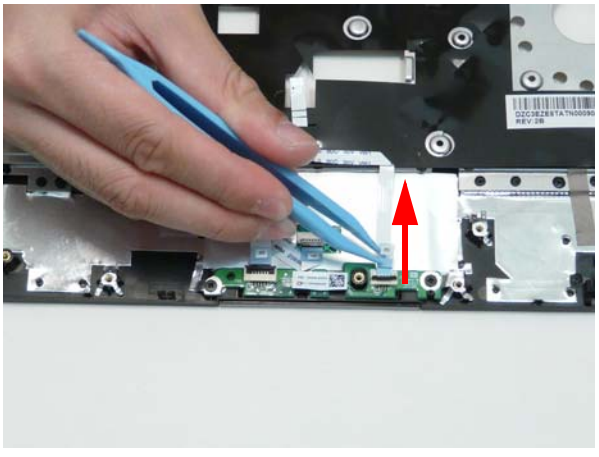


# Removing the Button Board

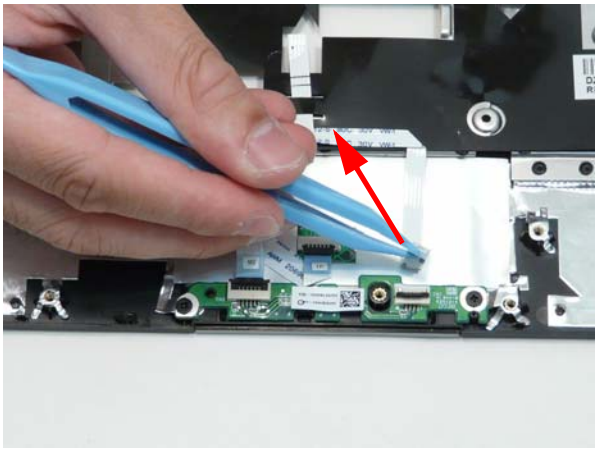
**IMPORTANT:** The Touchpad Board cannot be removed individually. To replace the Touchpad Board, replace the entire Upper Cover.

1. See “Removing the Upper Cover” on page 57.
2. Unlock the button board cable.

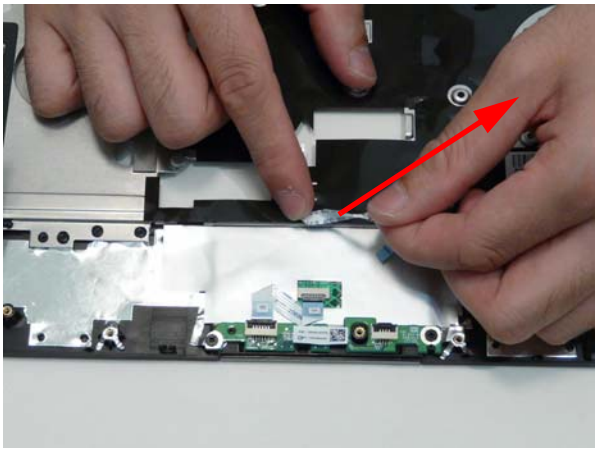
3. Disconnect the button board cable.



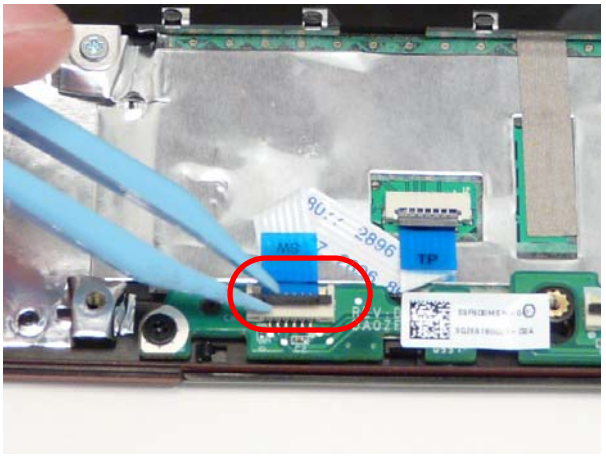
4. Pull the button board cable off the adhesive.



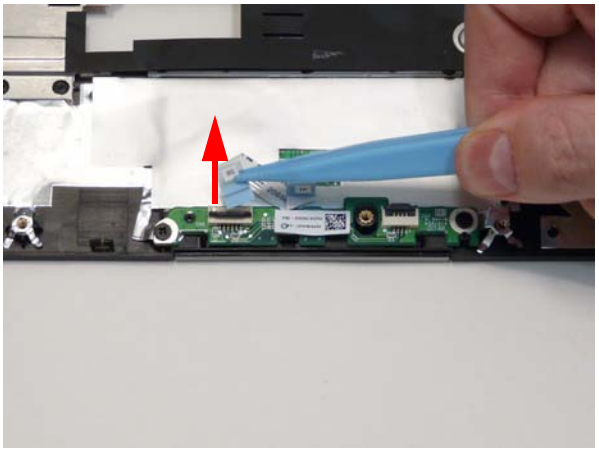
5. Remove the button board cable.



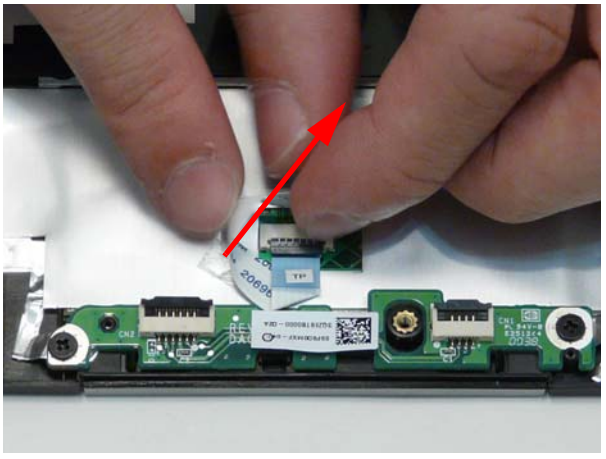
6. Unlock the touchpad cable from the button board.



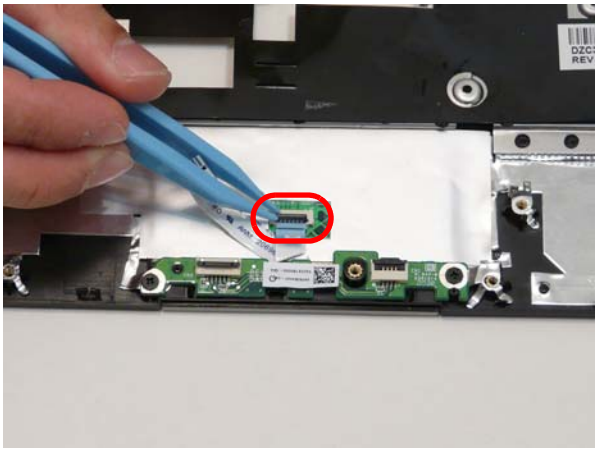

7. Disconnect the touchpad cable.



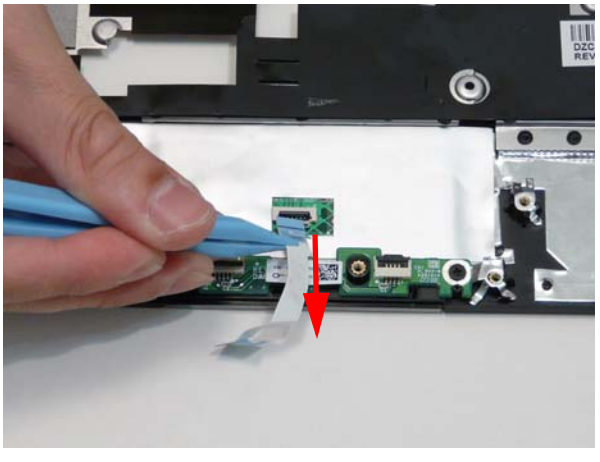
8. Pull the touchpad cable off the adhesive.



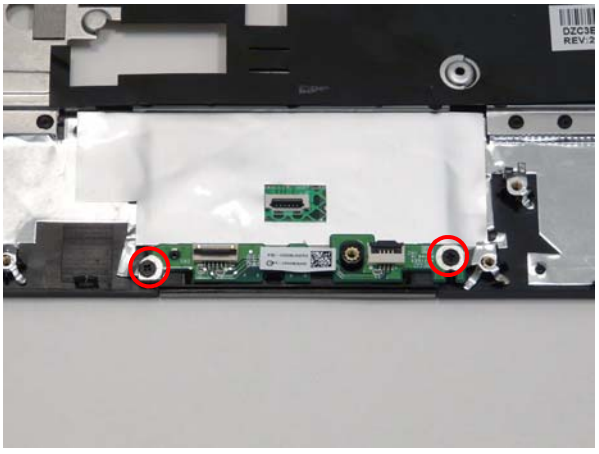
9. Unlock the touchpad cable from the touchpad.



10. Remove the touchpad cable.

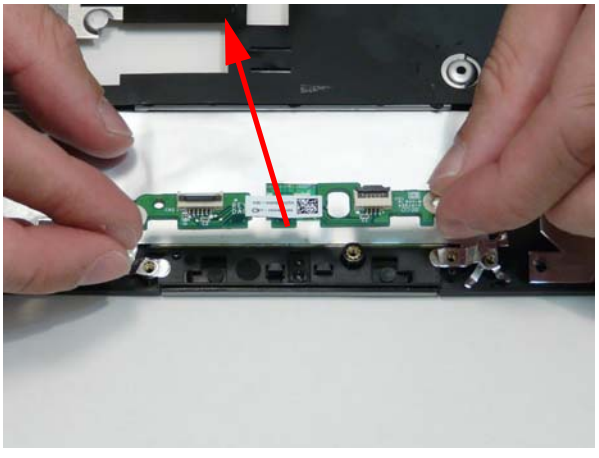


**11.** Remove the two (2) screws.



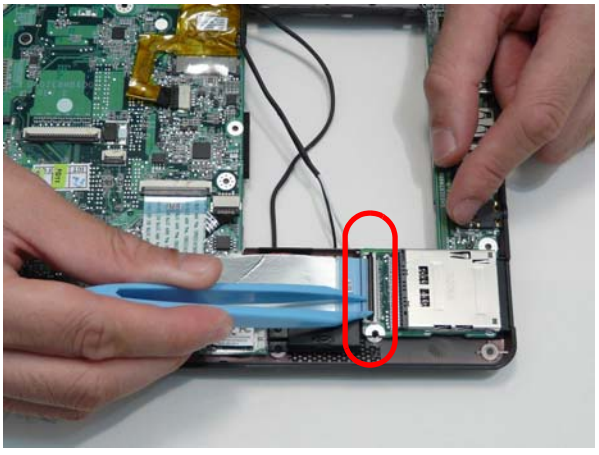
| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Button Board | M2*3 | 2 | |

**12.** Remove the button board.

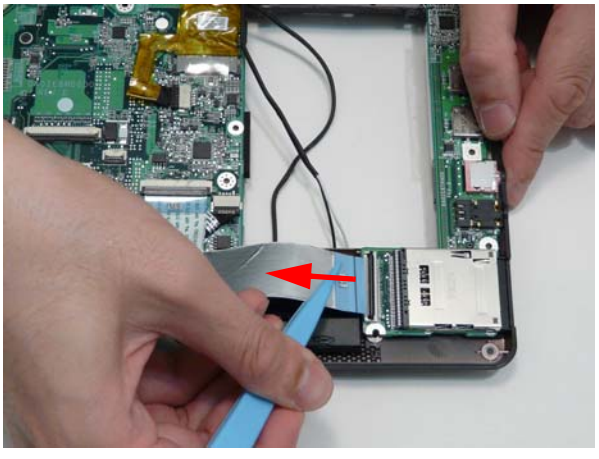


# Removing the I/O Board

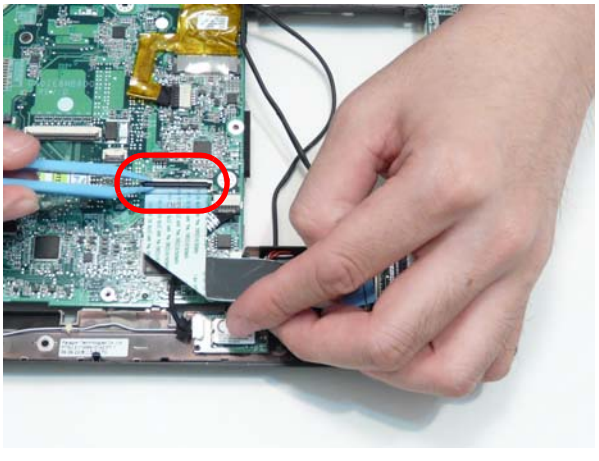
1. See “Removing the Upper Cover” on page 57.
2. Unlock the I/O cable I/O board connector.



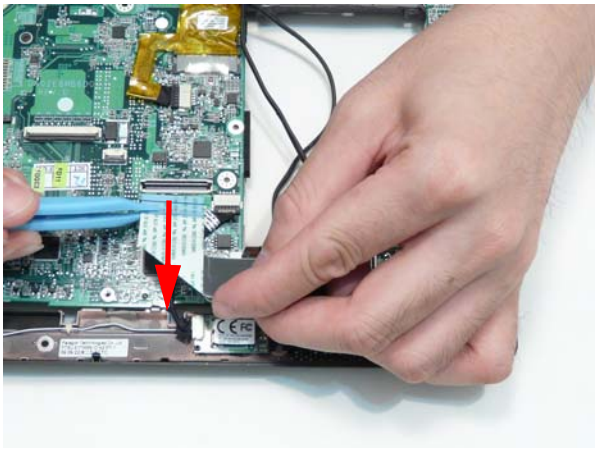
3. Disconnect the IO cable from the I/O board.



4. Unlock the I/O cable main board connector.



5. Remove the IO cable.

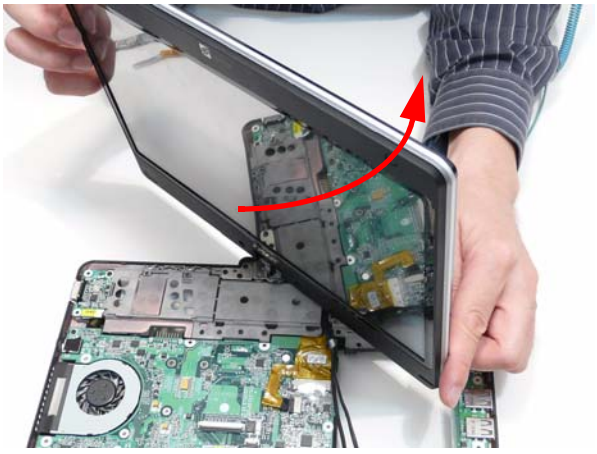


6. Turn the LCD module.

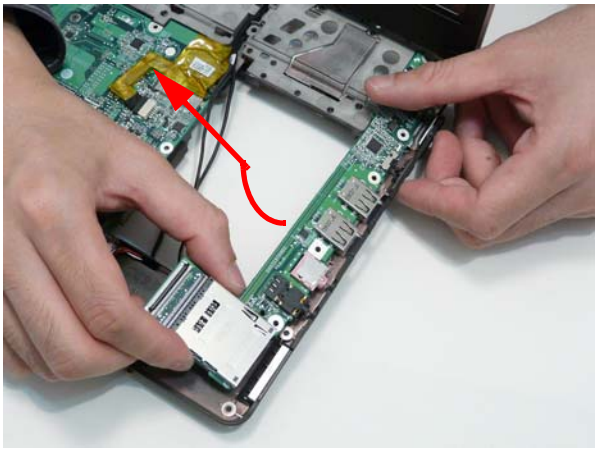
7. Remove the one (1) screw.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| I/O Board | M2*4 | 1 | |

8. Turn the LCD module.

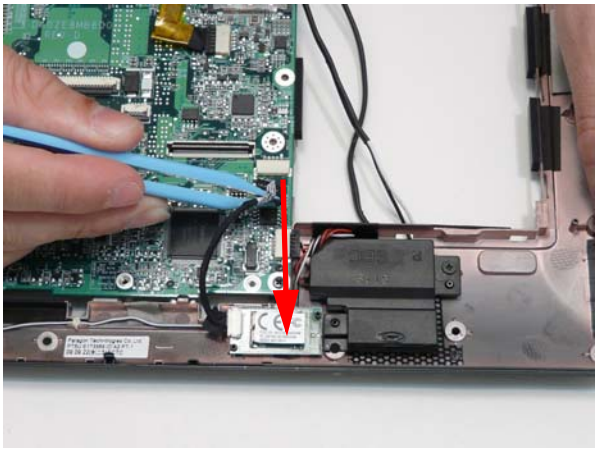


9. Lift the inside edge of the I/O board and pull the I/O board away.

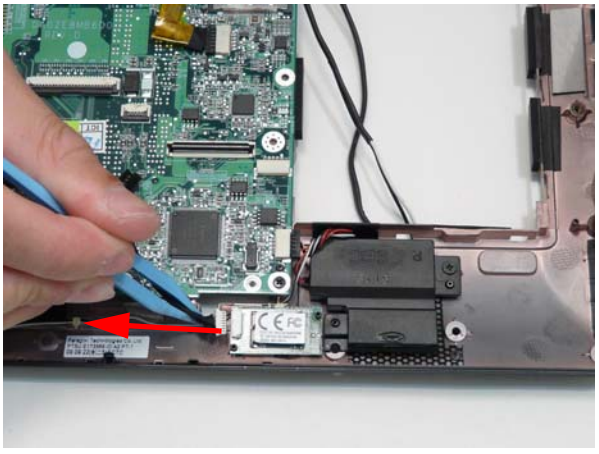


## Removing the Bluetooth Module

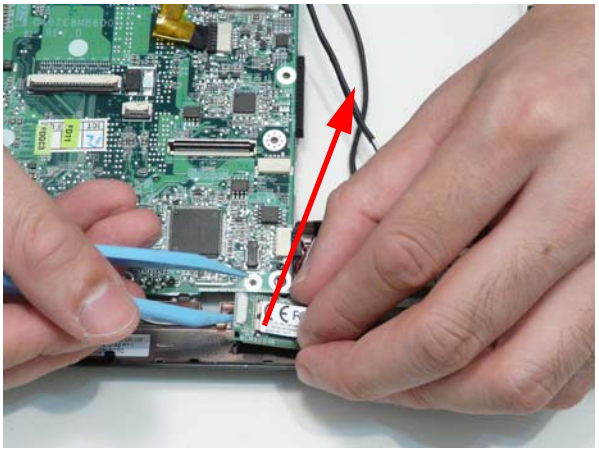
1. See “Removing the Upper Cover” on page 57.
2. See “Removing the I/O Board” on page 65.
3. Disconnect the Bluetooth cable from the mainboard.



4. Disconnect the Bluetooth cable from the Bluetooth module.

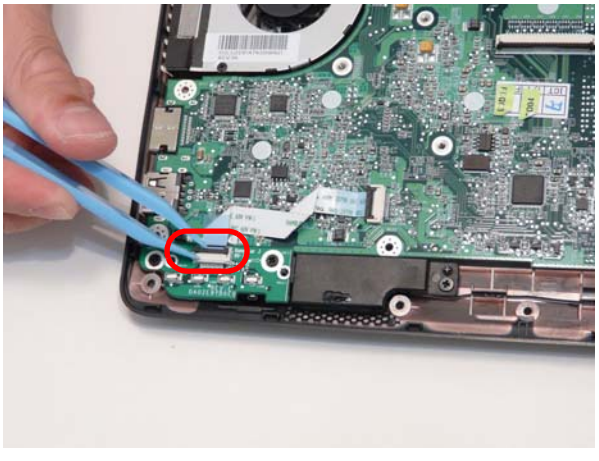


5. Pry the Bluetooth module off the adhesive and remove.

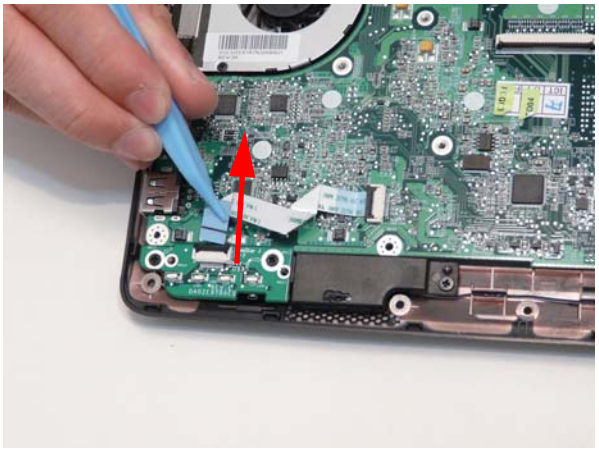


## Removing the LED Board

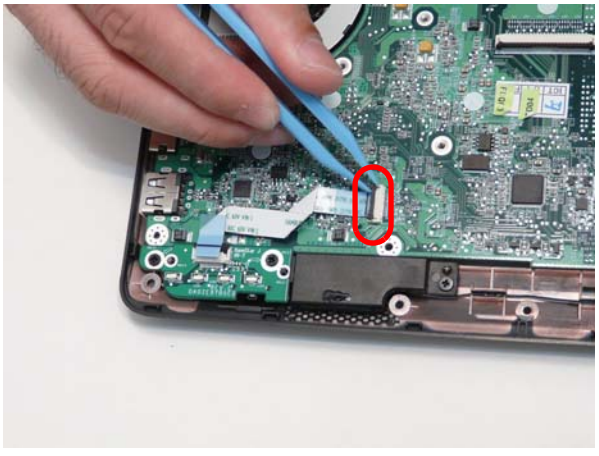
1. See “Removing the Upper Cover” on page 57.
2. Unlock the LED cable LED board connector.



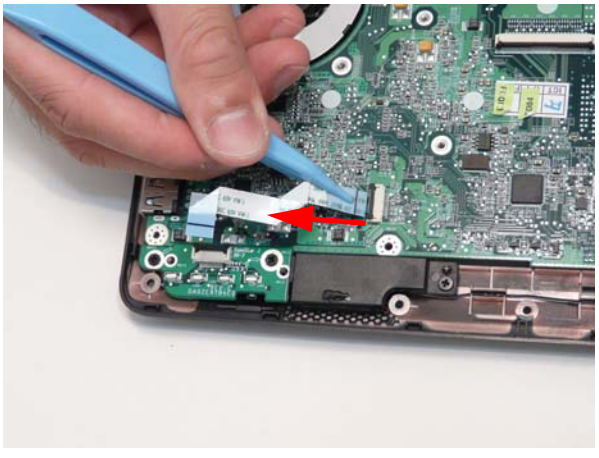
3. Disconnect the LED cable from the LED board connector.



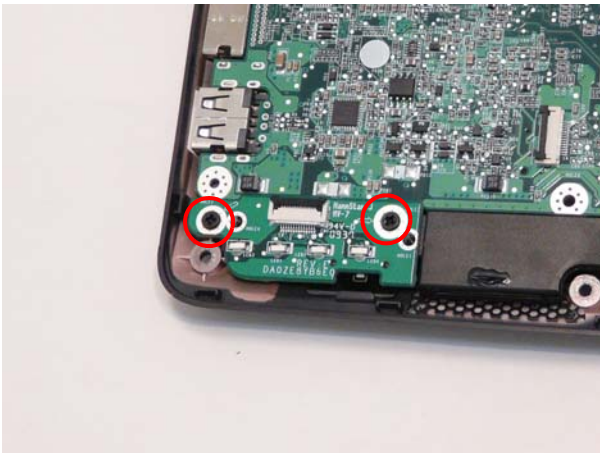
4. Unlock the LED cable main board connector.



5. Remove the LED cable.

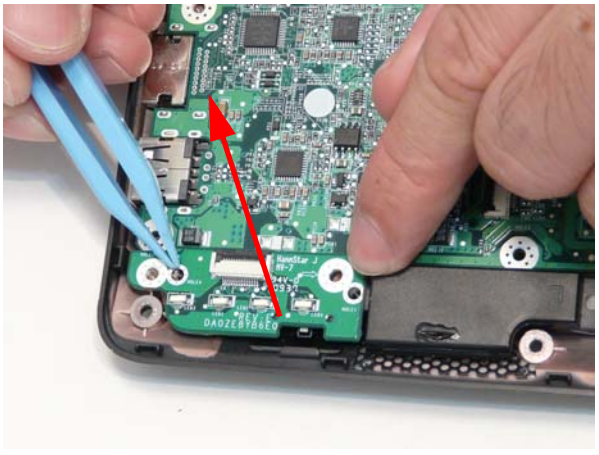


6. Remove the two (2) screws.



| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| LED Board | M2*4 | 2 | |

7. Remove the LED board.



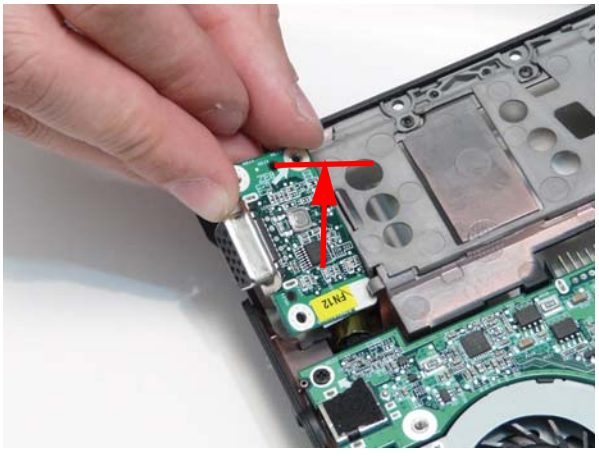
# Removing the CRT Board

1. See “Removing the Upper Cover” on page 57.
2. Turn the LCD module to expose the CRT board.

3. Remove the one (1) screw.

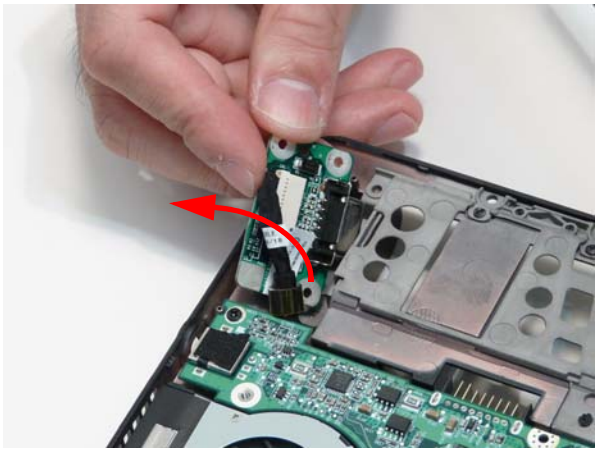
| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| CRT Board | M2*4 | 1 | |

4. Lift the CRT board up one (1) centimetre (0.5 inch).

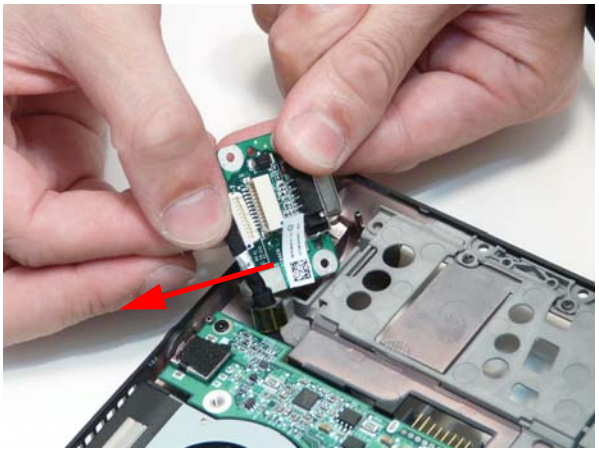


**CAUTION:** Do not lift too high and strain the cable and connector still attached.

5. Turn the CRT board over.

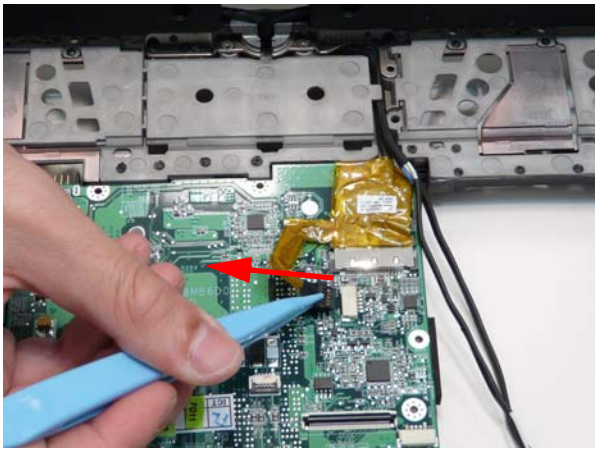


6. Remove the CRT cable.

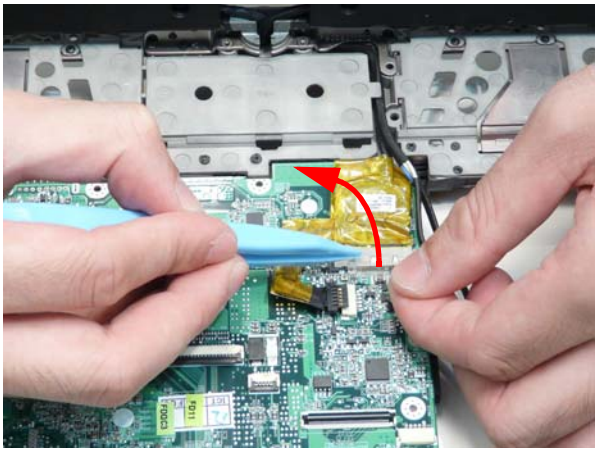


# Removing the Mainboard

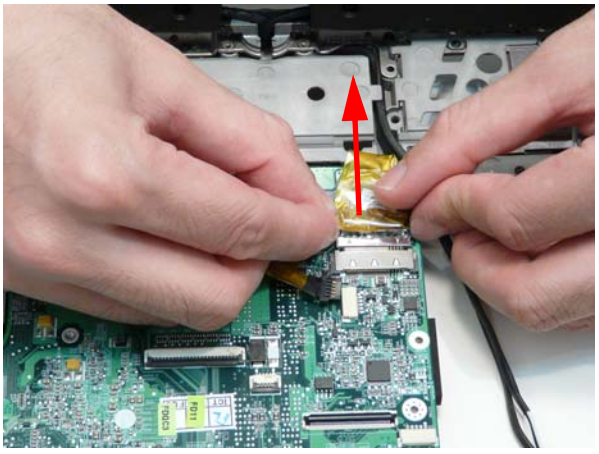
1. See “Removing the Upper Cover” on page 57.
2. See “Removing the I/O Board” on page 65.
3. See “Removing the Bluetooth Module” on page 67.
4. See “Removing the LED Board” on page 68.
5. See “Removing the CRT Board” on page 71.
6. Disconnect the touchscreen cable.



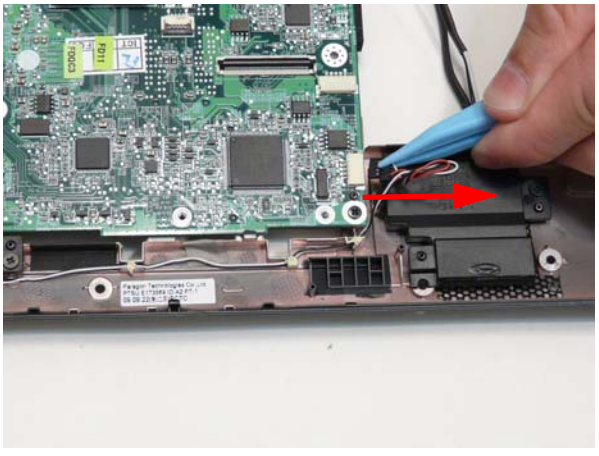
7. Remove the LCD connector cable clear protective cover.



8. Disconnect the LCD cable.



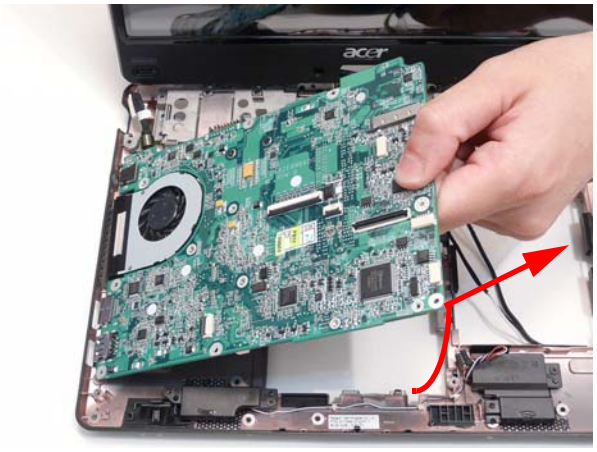
9. Disconnect the speaker cable.



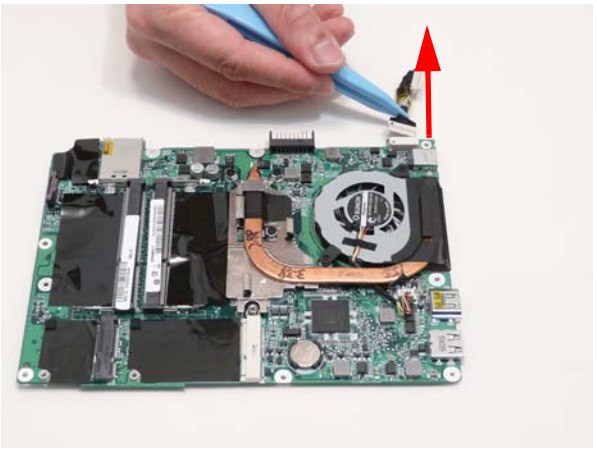
10. Remove the two (2) screws.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Main Board | M2*4 | 2 | |

**11.** Lift up the main board from the inside edge and pull away.

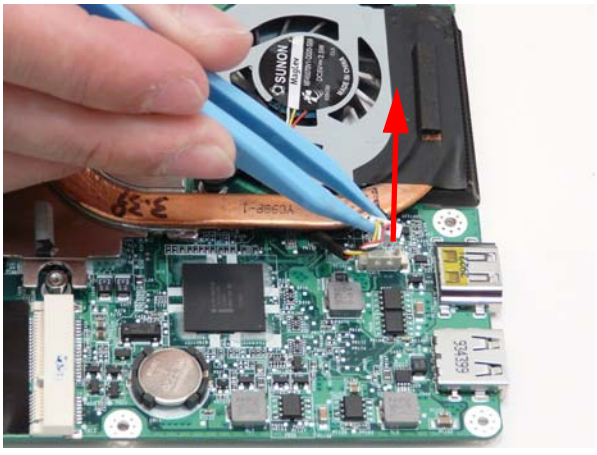


**12.** Remove the CRT cable.

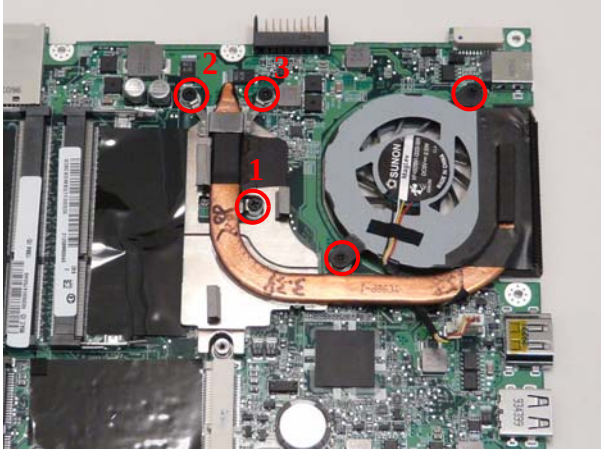


# Removing the Thermal Module

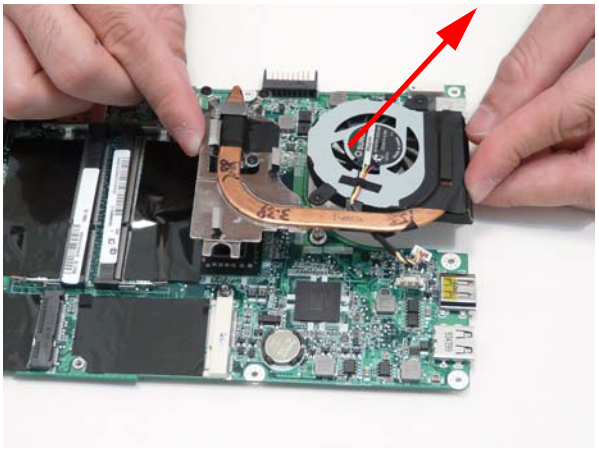
1. See “Removing the Mainboard” on page 73.
2. Disconnect the thermal module cable.



3. Loosen the five (5) captive screws. The three (3) captive screws for the CPU connection marked 1,2,3 must be loosened in order: first 3, then 2, then 1.

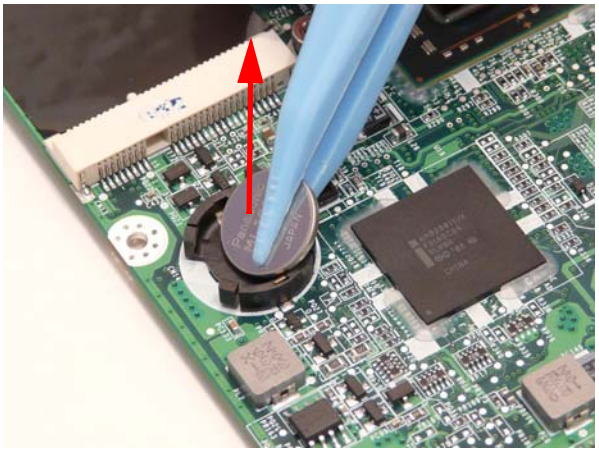



4. Remove the thermal module.



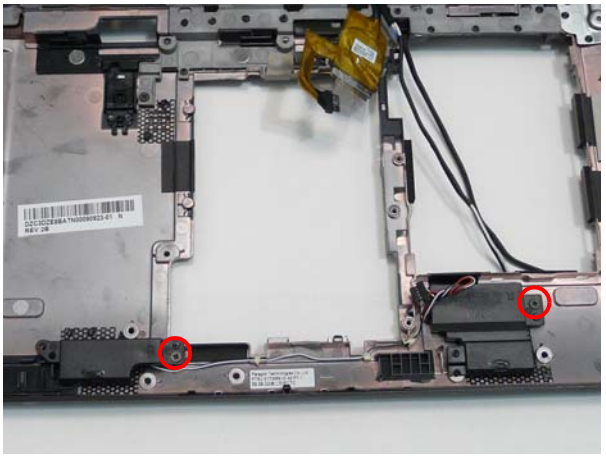
## Removing the RTC Battery

1. See “Removing the Mainboard” on page 73.
2. Carefully lift the battery out of the main board.



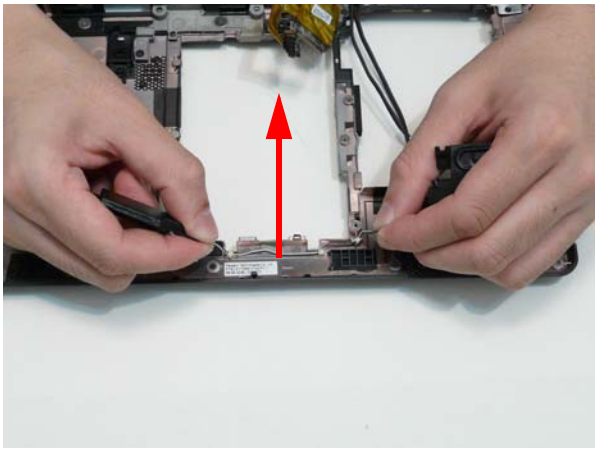
## Removing the Speaker Modules

1. See “Removing the Mainboard” on page 73.
2. Remove the two (2) screws.



| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Speaker | M2*3 | 2 | |

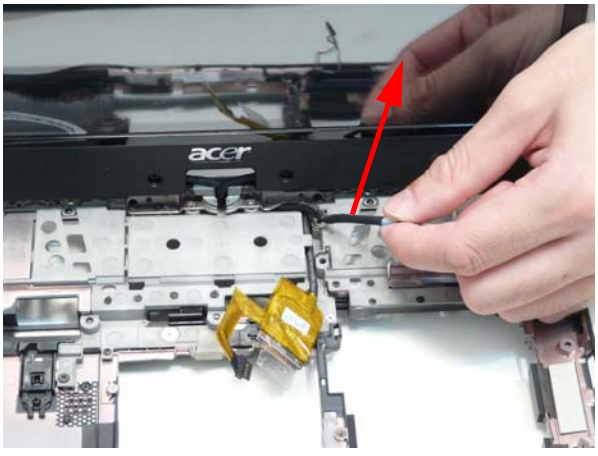
3. Grasp the speaker housings and remove the speaker module.

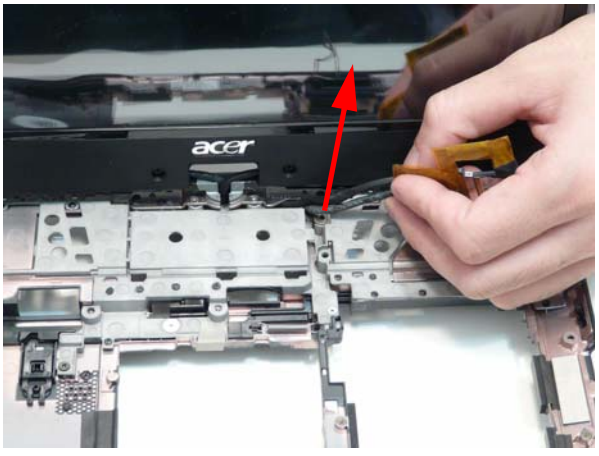


## Removing the LCD Module

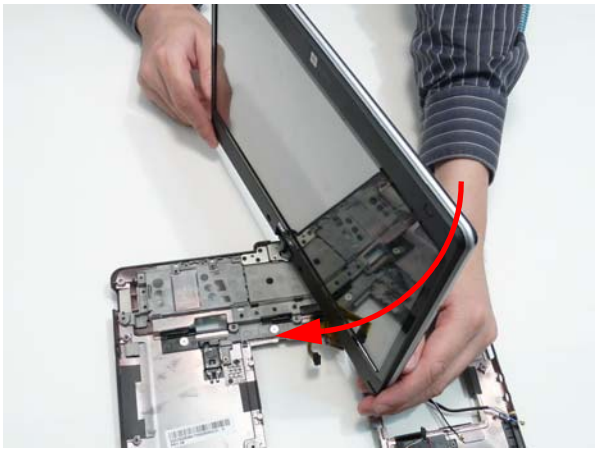
1. See “Removing the Mainboard” on page 73.
2. Lift the antenna cable (i) and the LCD cable (ii) away from the retention guide hook.

i) ii)

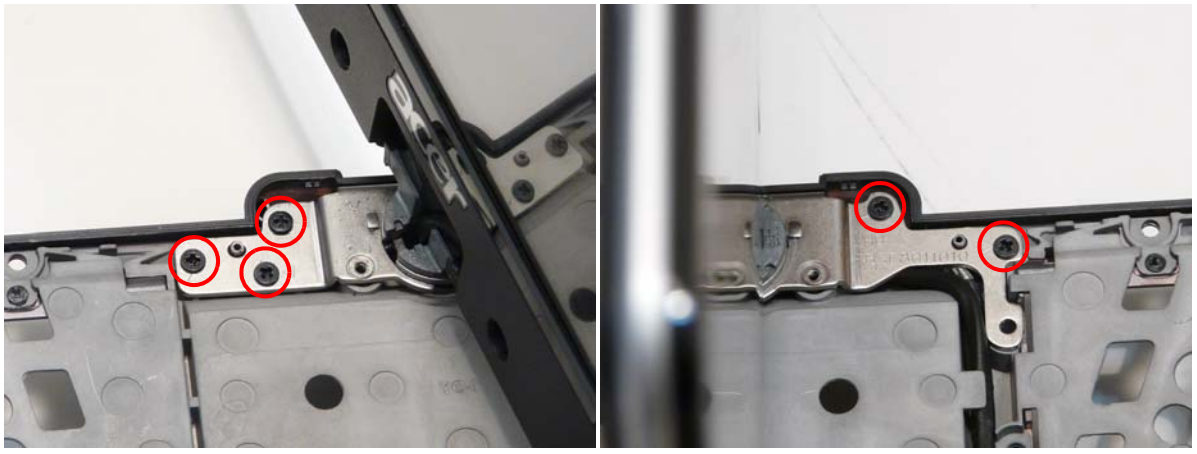



3. Turn the LCD module ninety (90) degrees.

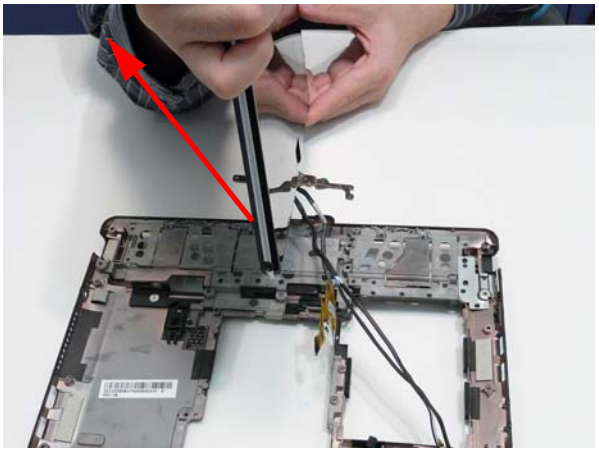


4. Remove the five (5) screws.



| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| LCD Module | M2*5 | 5 | |

5. Remove the LCD module.

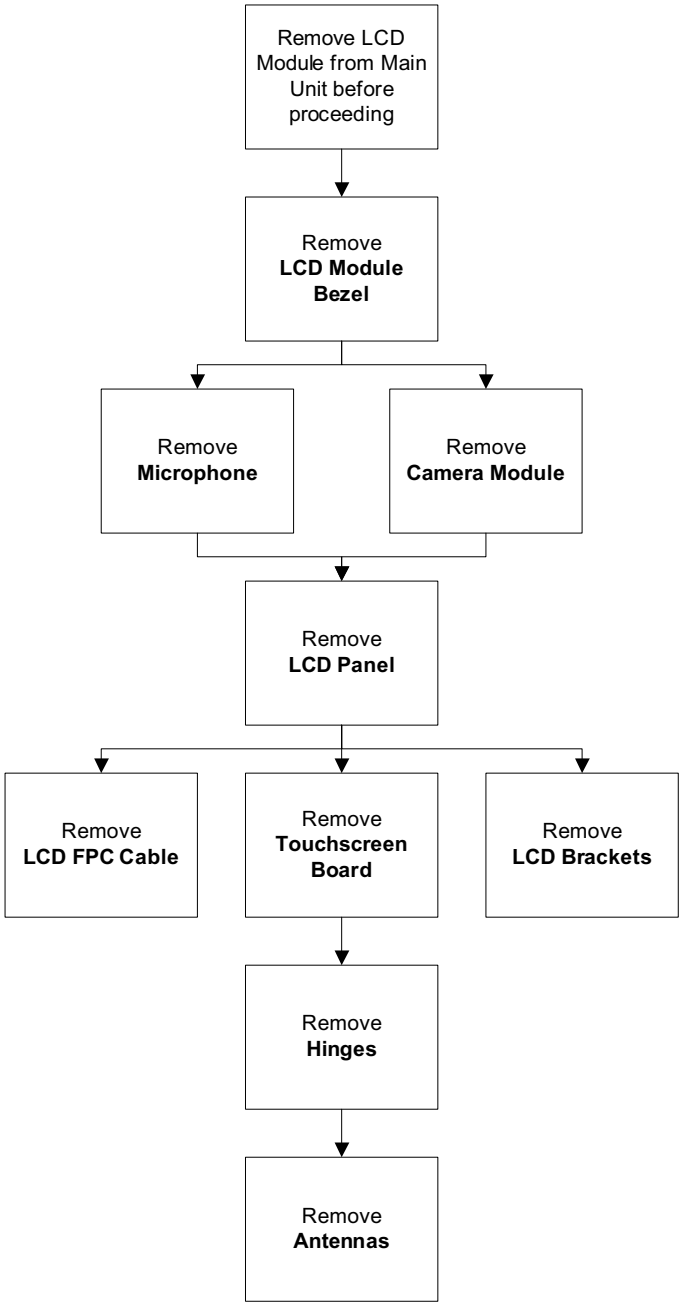


# LCD Module Disassembly Process

**IMPORTANT:** Cable paths and positioning may not represent the actual model. During the removal and replacement of components, ensure all available cable channels and clips are used and that the cables are replaced in the same position.

**NOTE:** The product previews seen in the disassembly procedures may not represent the final product color or configuration.

## LCD Module Disassembly Flowchart

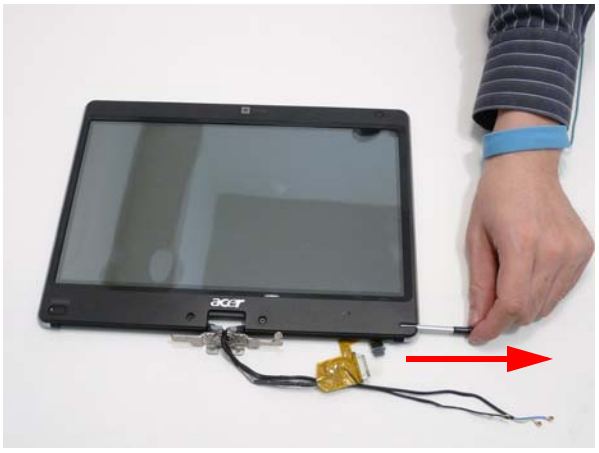


**Screw List**

| Step | Screw | Quantity | Part No. |
|---|---|---|---|
| LCD Bezel | M2*5 | 2 | 86.TG607.004 |
| LCD Panel | M2*4 | 4 | 86.W0107.003 |
| LCD Brackets | M2*2.5 | 4 | 86.TPK07.001 |
| Touchscreen Board | M2*4 | 2 | 86.W0107.003 |
| Hinge | M2*4 | 3 | 86.W0107.003 |

# Removing the LCD Bezel

1. See “Removing the LCD Module” on page 78.
2. Remove the stylus.



3. Remove the screw covers

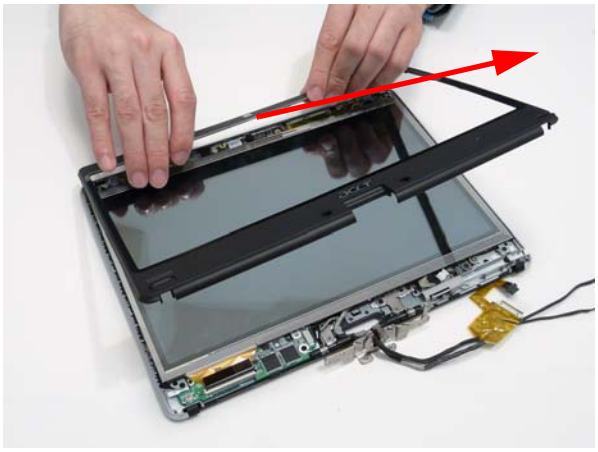
4. Remove the two (2) screws.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| LCD Bezel | M2*5 | 2 | |

5. Pry up the bezel from the bottom edge.

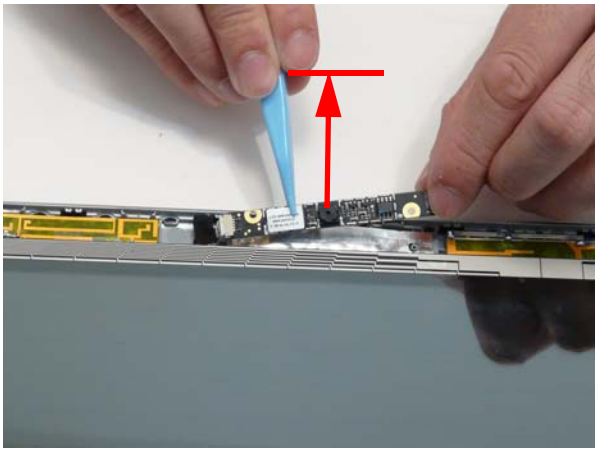
6. Pry up the bezel sides.

7. Pry up the bezel top edge and remove.

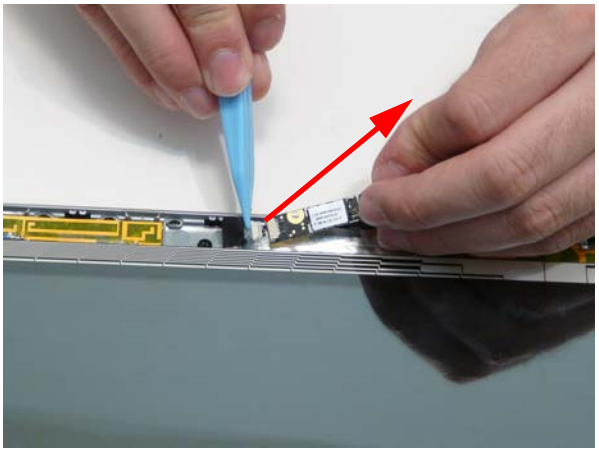


# Removing the Camera Board

1. See “Removing the LCD Bezel” on page 82.
2. Pry up the camera board from the adhesive.

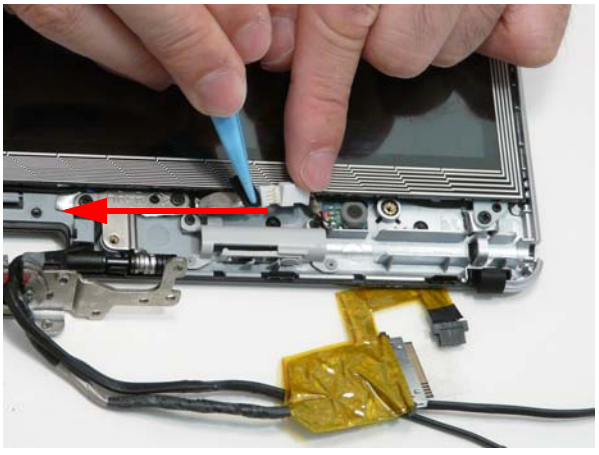


3. Disconnect the camera cable.



## Removing the Microphone

1. See “Removing the LCD Bezel” on page 82.
2. Disconnect the microphone cable.



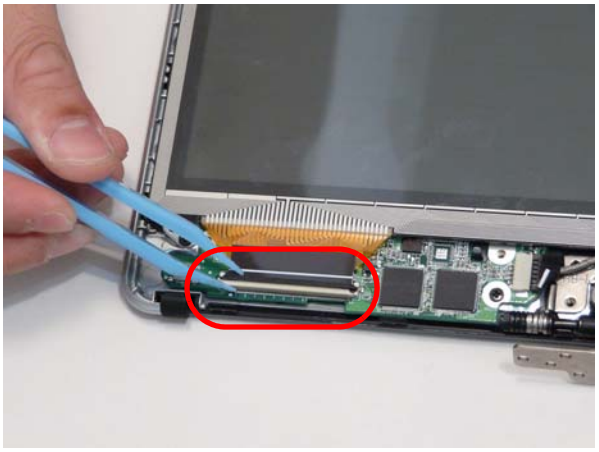
3. Pry up the microphone from the adhesive.

## Removing the LCD Panel

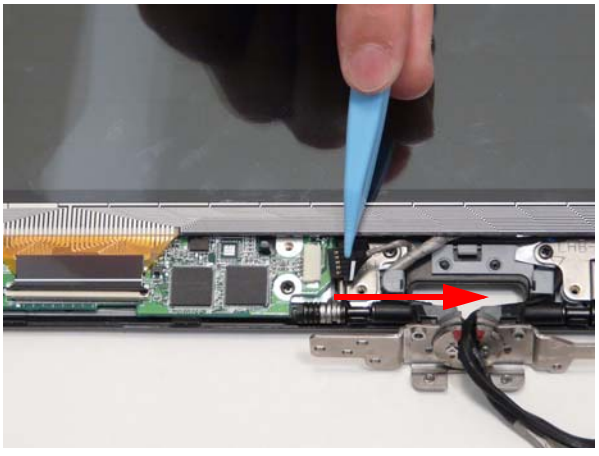
1. See “Removing the Camera Board” on page 85.
2. See “Removing the Microphone” on page 86.

**WARNING:** The edges of the touchscreen surface are sharp and care should be taken when handling the panel.

3. Unlock the touchscreen FPC.



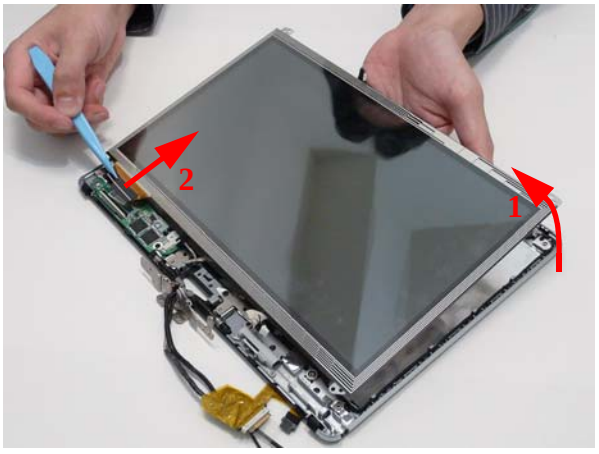
4. Disconnect the touchscreen cable.



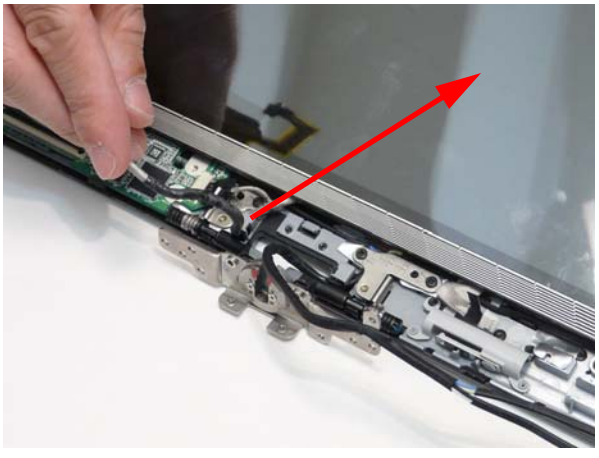
5. Remove the four (4) screws.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Touchscreen Board | M2*4 | 4 | |

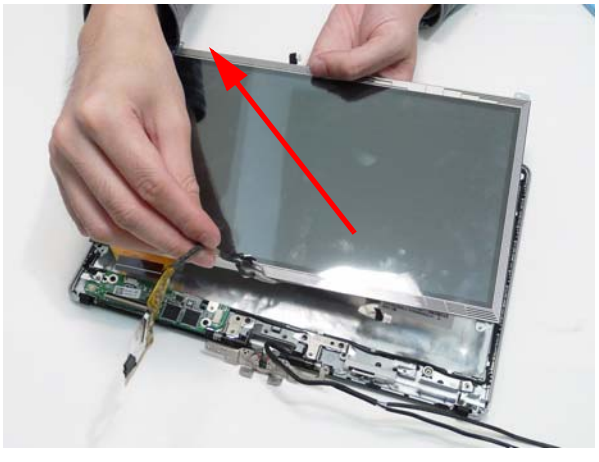
6. Lift up the panel (1) and disconnect the touchscreen FPC (2).




7. Remove the LCD cable from the retention guide hook.



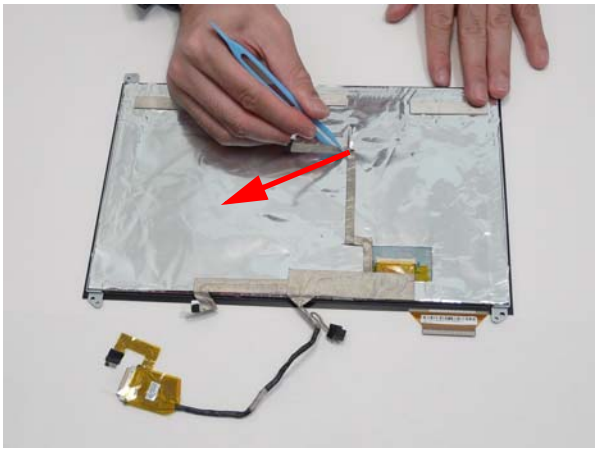
8. Remove the LCD panel.



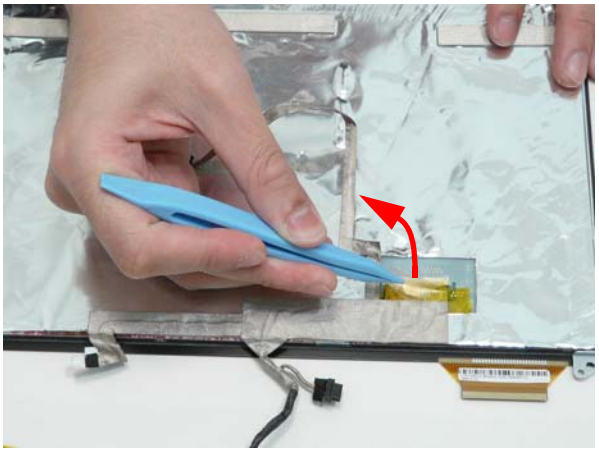
## Removing the LCD Cable

1. See “Removing the Microphone” on page 86.
2. Turn the LCD panel face down on a dry clean soft surface.

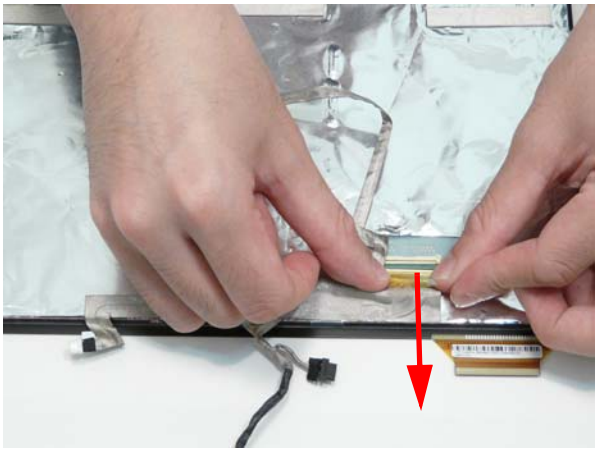
3. Pull the camera cable from the adhesive.



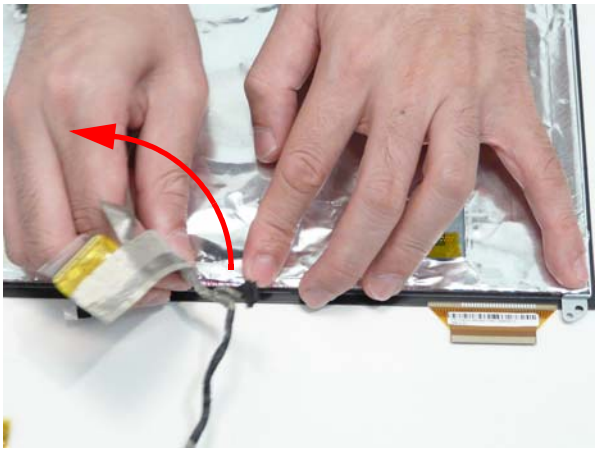
4. Lift up the LCD connector clear protective cover.



5. Disconnect the LCD connector.



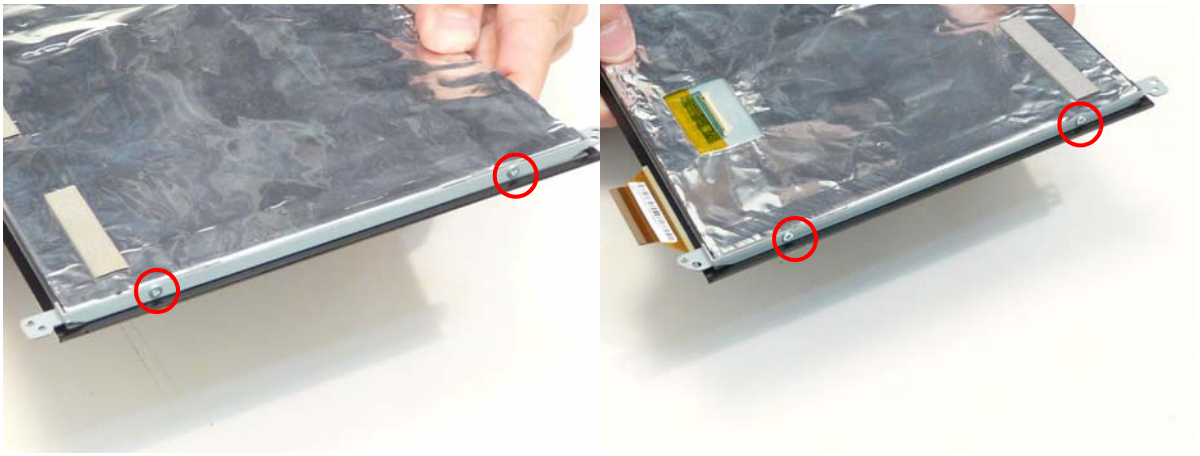
6. Pull up the LCD cable from the adhesive.



7. Pull the touchscreen cable from the adhesive.

# Removing the LCD Brackets

1. See “Removing the Microphone” on page 86.
2. Remove the four (4) screws from the left and right brackets.

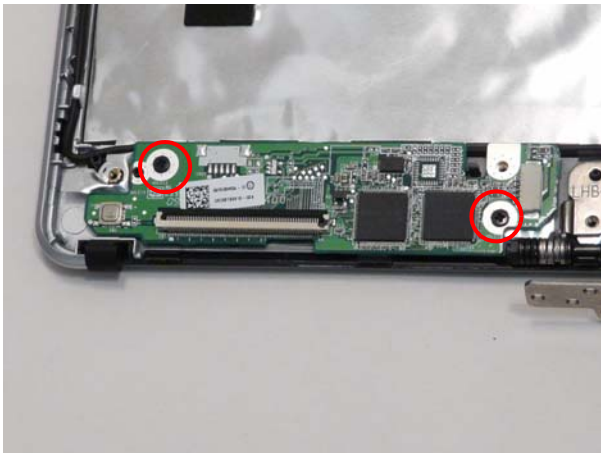


| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| LCD Panel Brackets | M2*2.5 | 4 | |

3. Remove the brackets.

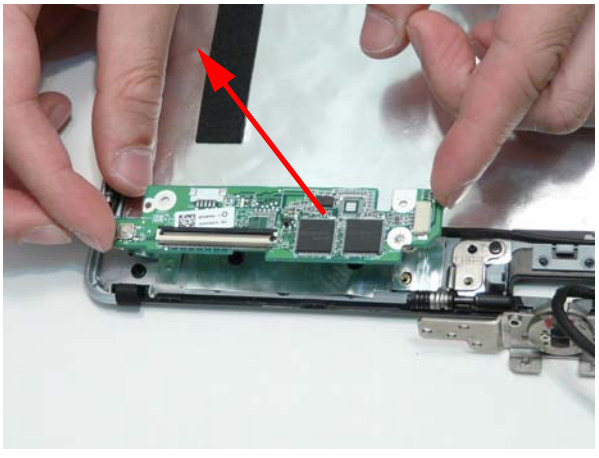
# Removing the Touchscreen Board

1. See “Removing the LCD Panel” on page 86.
2. Remove the two (2) screws.



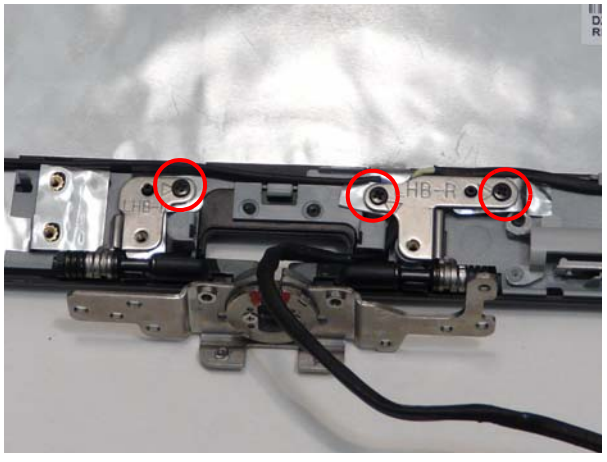
| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Touchscreen Board | M2*4 | 2 | |

3. Remove the touchscreen board.



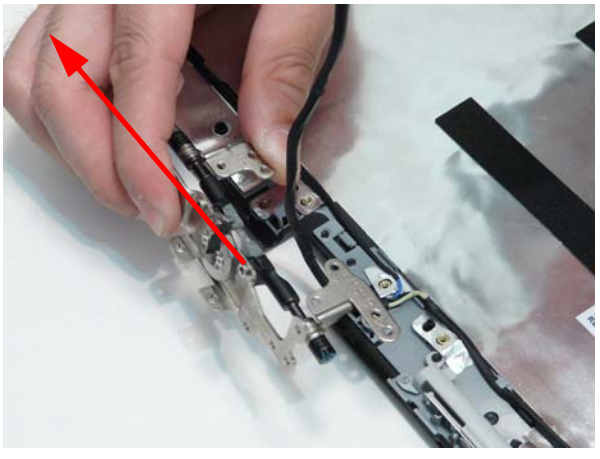
# Removing the Hinge

1. See “Removing the LCD Panel” on page 86.
2. Remove the three (3) screws.



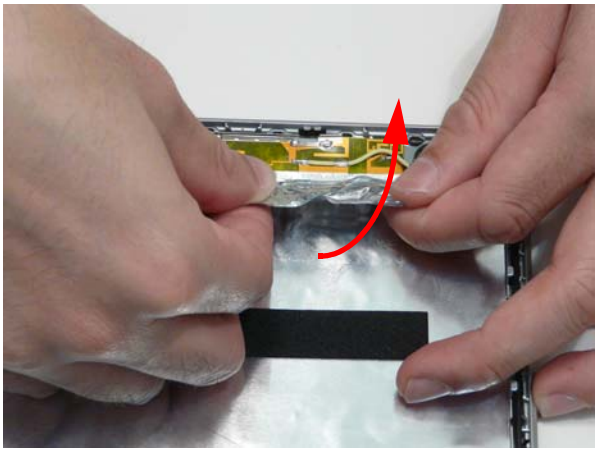
| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Hinge | M2*3 | 3 | |

3. Remove the hinge.

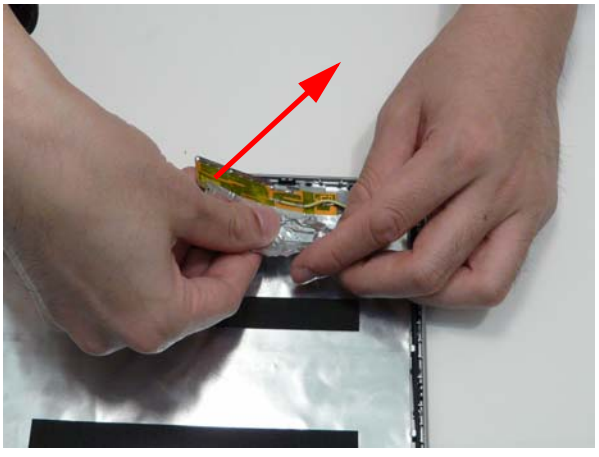


# Removing the Antennas

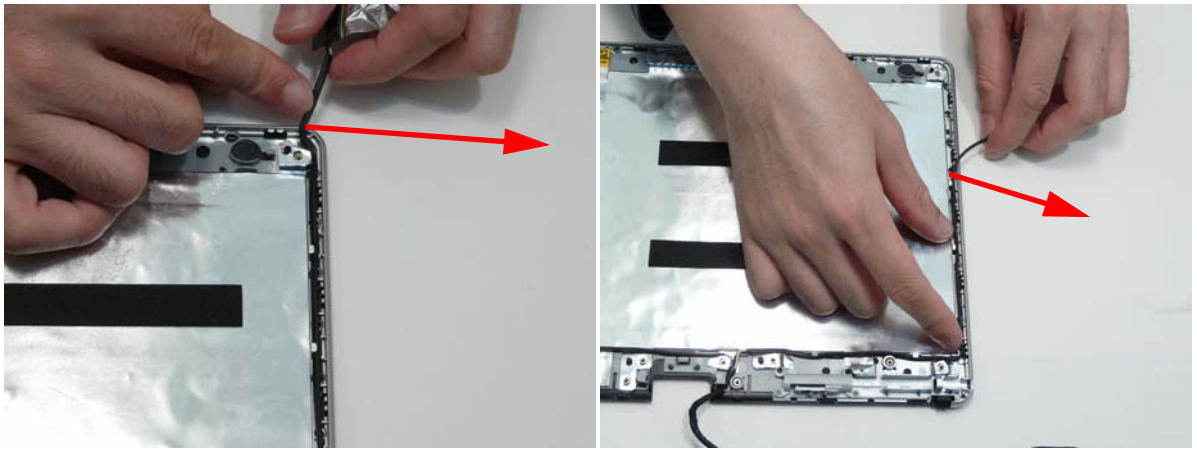
1. See “Removing the Microphone” on page 86.
2. See “Removing the Touchscreen Board” on page 92.
3. See “Removing the Hinge” on page 93.
4. Peel the antenna foil off the cover.

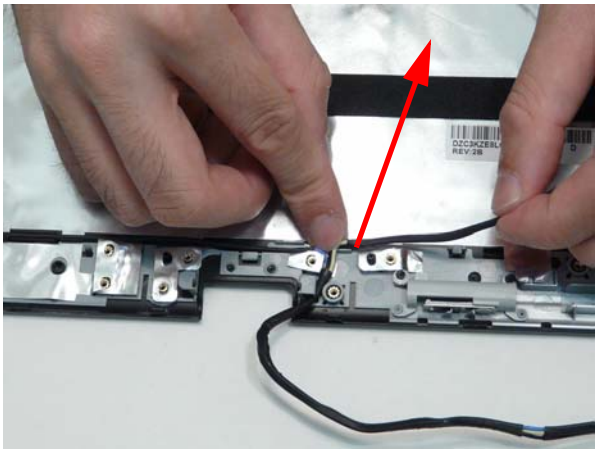


5. Peel the antenna off the adhesive.

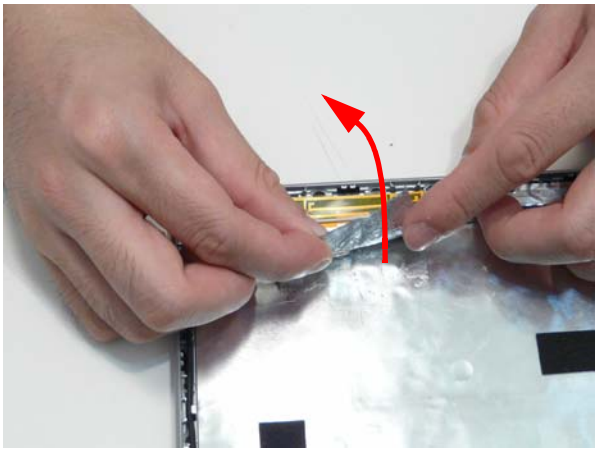


6. Remove the antenna cable from the retention guide hooks.

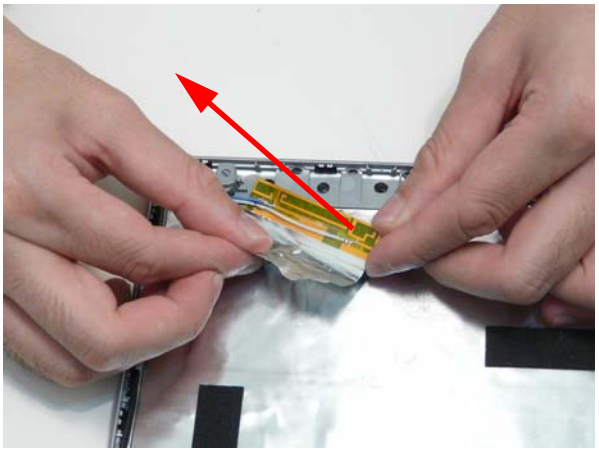




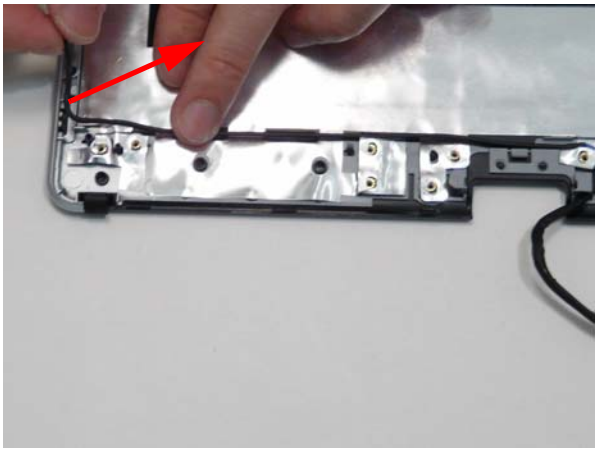
7. Peel the antenna foil off the cover.

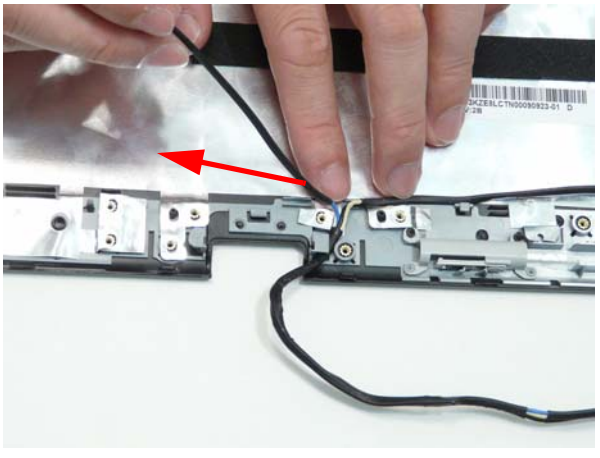


8. Peel the antenna off the adhesive.

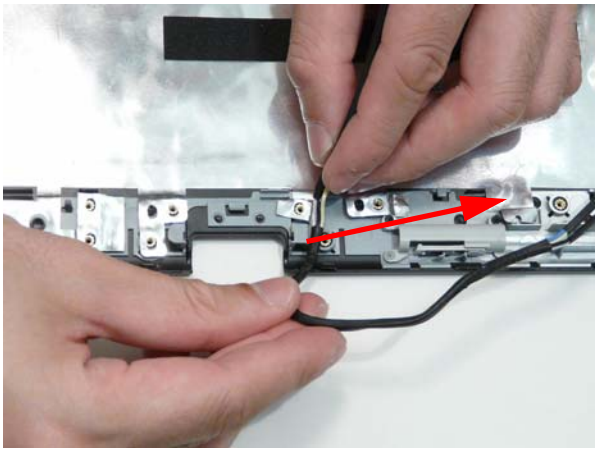


9. Remove the antenna cable from the retention guide hooks.





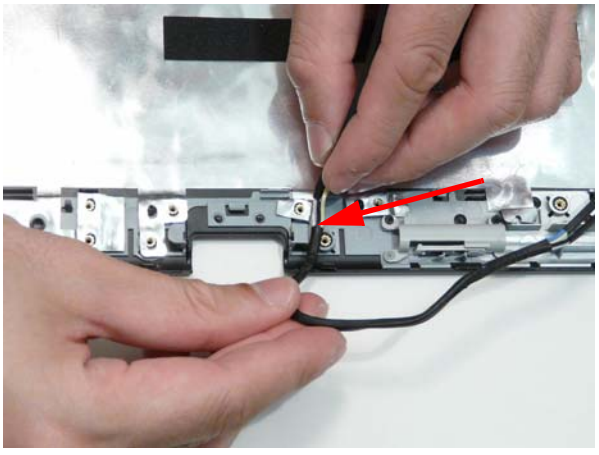
10. Remove both antenna cables from the cover.



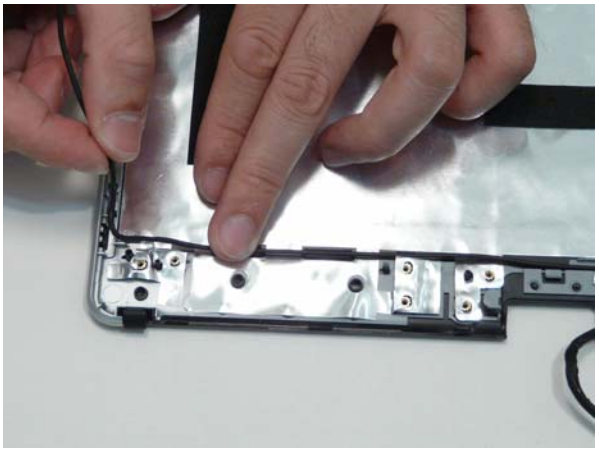
# LCD Reassembly Procedure

## Replacing the Antennas

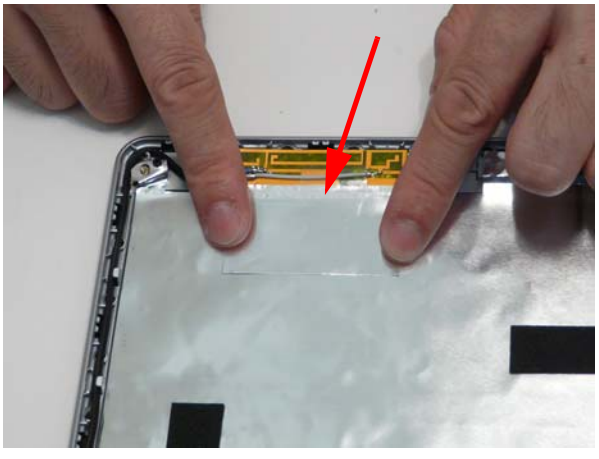
1. Lay the two (2) cables under the retention guide exit hook.



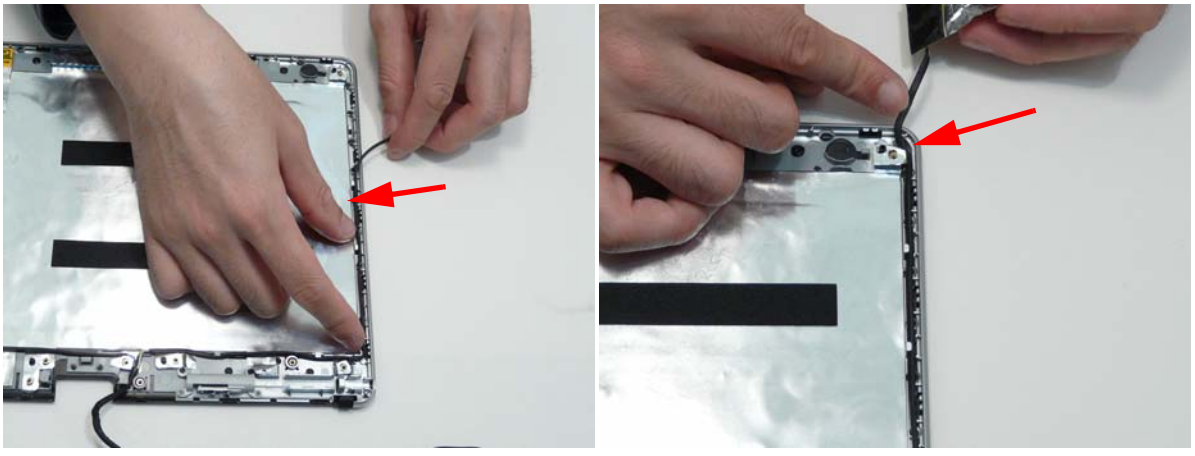
2. Lay the left side cable under the retention guide hooks.



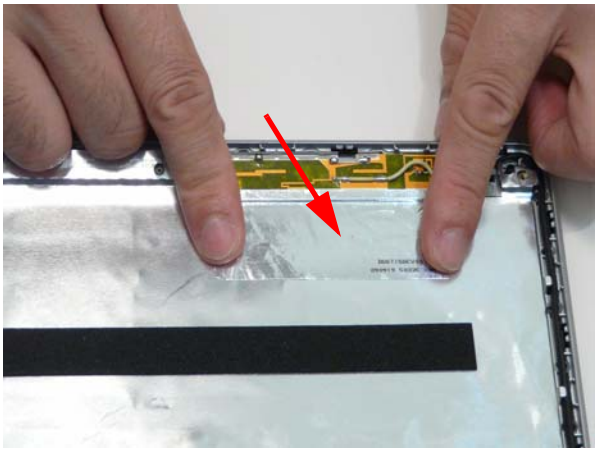
3. Adhere the left antenna pad (black cable) to the cover.



4. Lay the right side cable under the retention guide hooks.

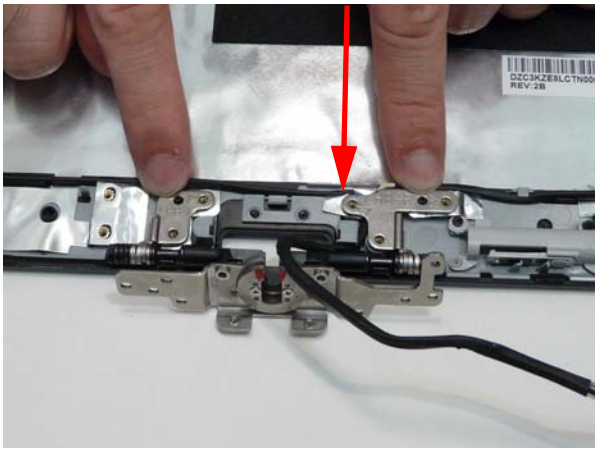


5. Adhere the right side antenna pad (yellow cable) to the cover.

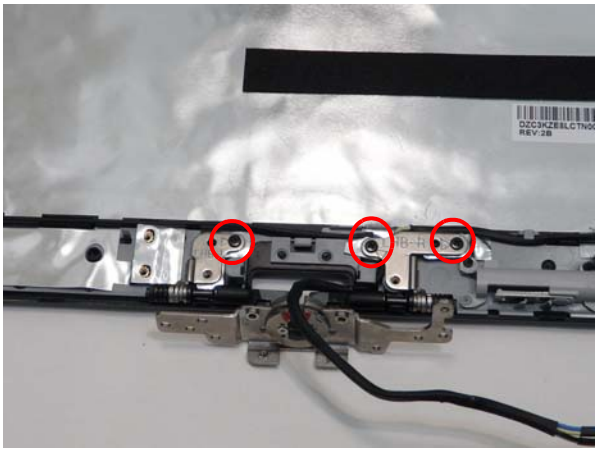


## Replacing the Hinge

1. Place the hinge on the cover.



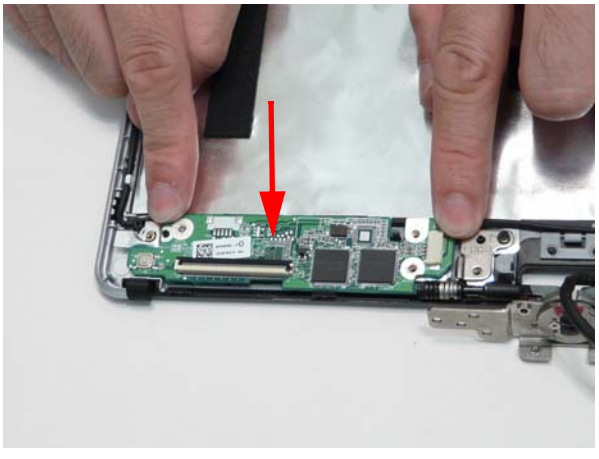
2. Replace the three (3) screws.



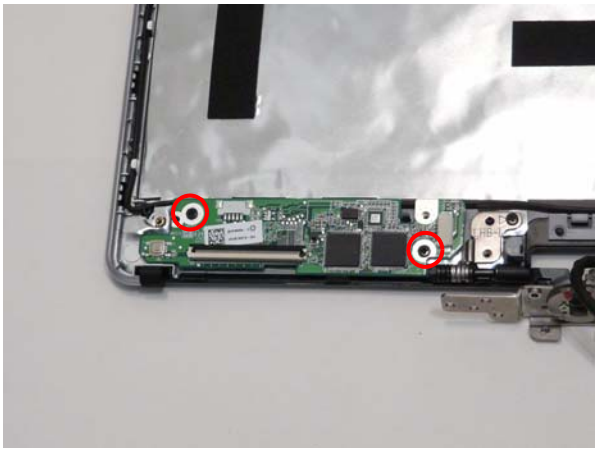
| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Hinge | M2*3 | 3 | |

## Replacing the Touchscreen Board.

1. Place the touchscreen board onto the cover.



2. Replace the two (2) screws.

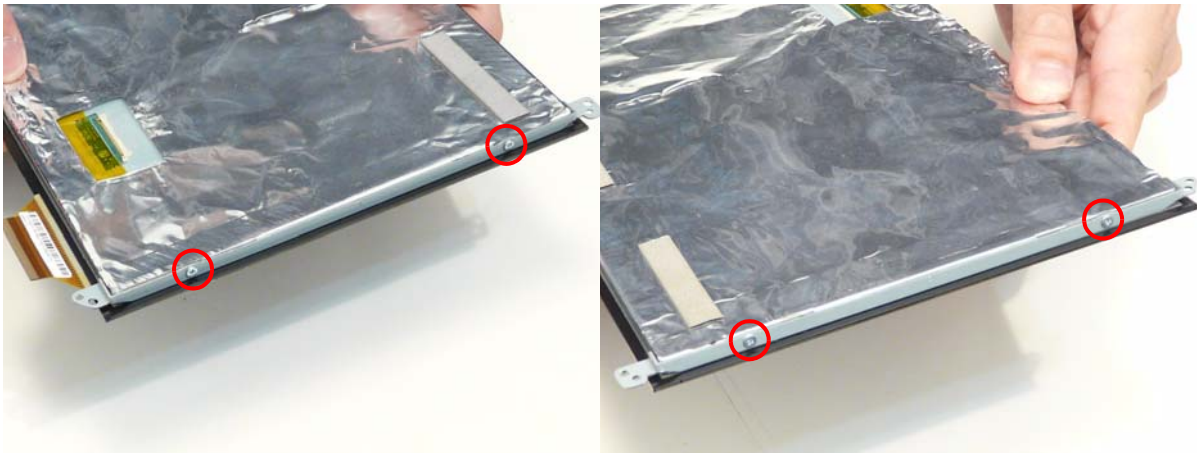


| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Touchscreen Board | M2*4 | 2 | |

## Replacing the LCD Brackets

1. Place the two (2) brackets on the panel paying attention to the correct orientation.

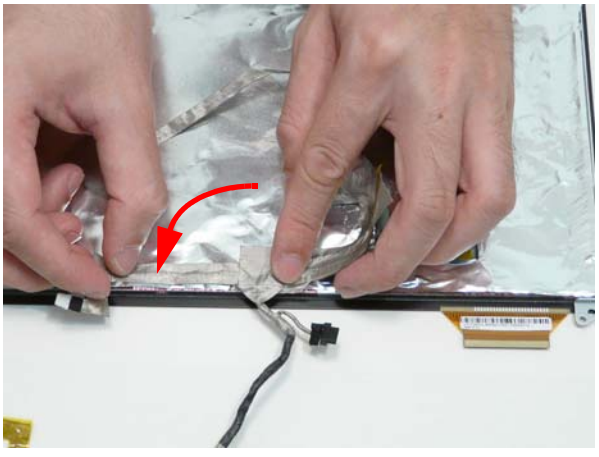
2. Replace the four (4) screws.



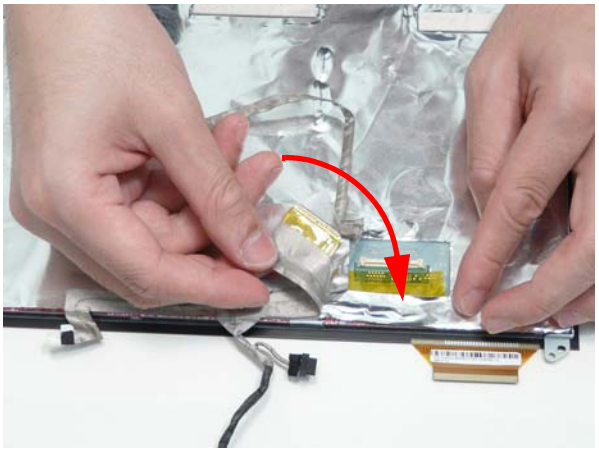
| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| LCD Panel Brackets | M2*2.5 | 4 | |

## Replacing the LCD Cable

1. Adhere the touchscreen cable to the panel.

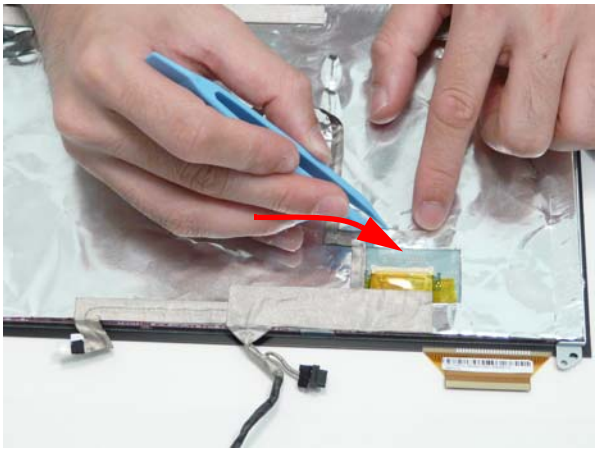


2. Adhere the LCD cable to the panel.

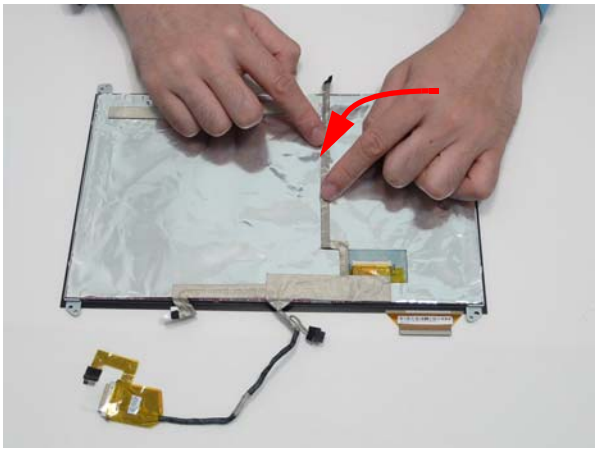


3. Connect the LCD connector to the panel.

4. Adhere the clear protective cover over the LCD connector.

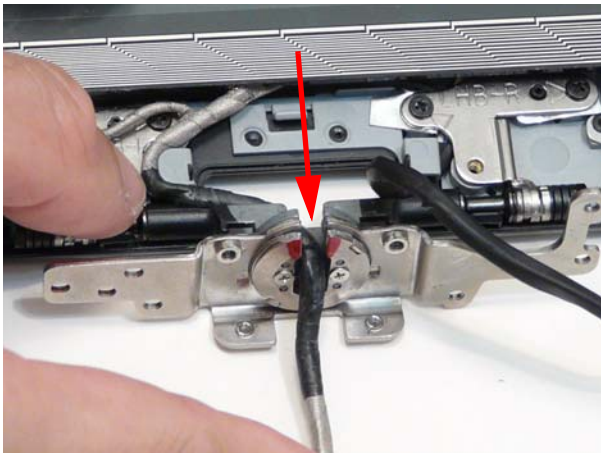


5. Adhere the camera cable to the panel.

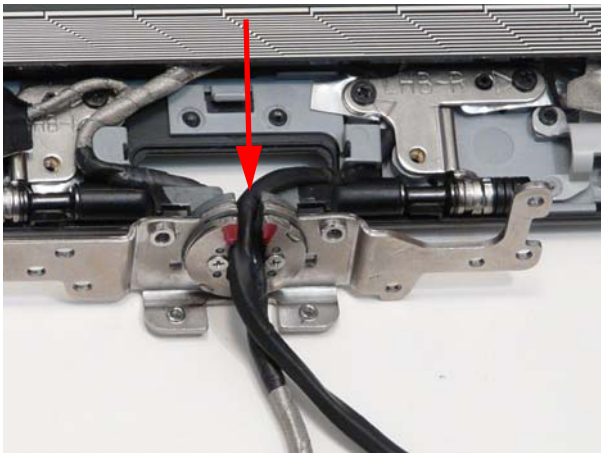


## Replacing the LCD Panel

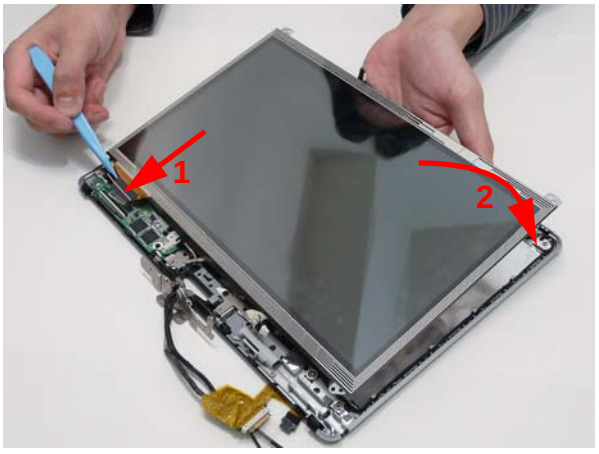
1. Lay the LCD cable first through the hinge.



2. Lay the antenna cable through the hinge.



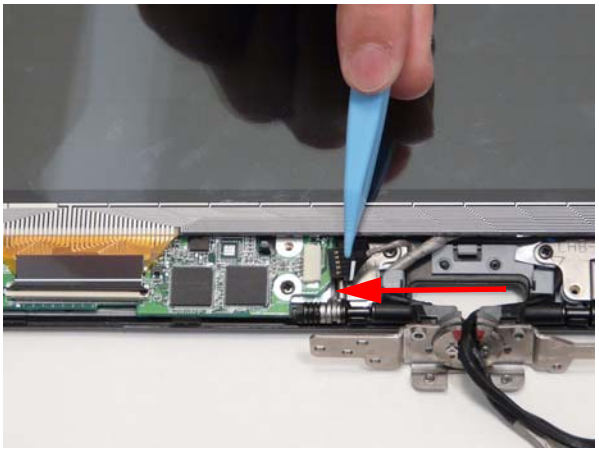
3. Connect the touchscreen FPC (1) and lay the panel down in the cover (2).



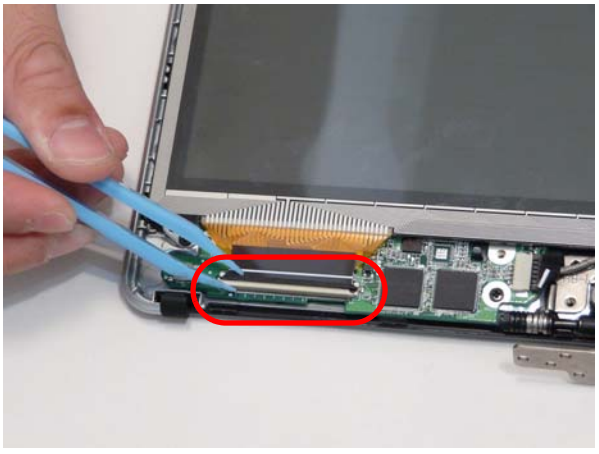

4. Replace the four (4) screws.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| LCD Panel | M2*4 | 4 | |

5. Connect the touchscreen cable.

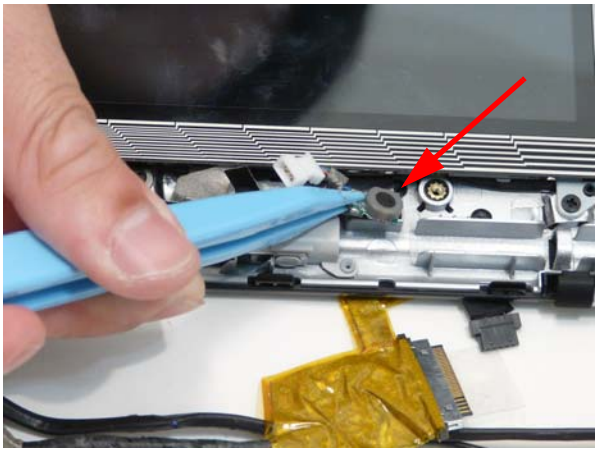


6. Lock the touch screen FPC.

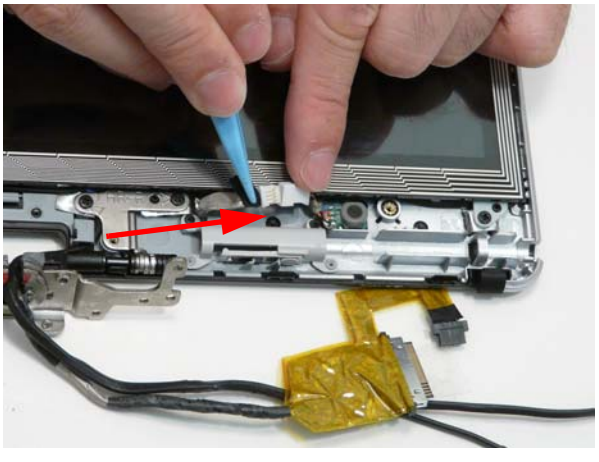


## Replacing the Microphone.

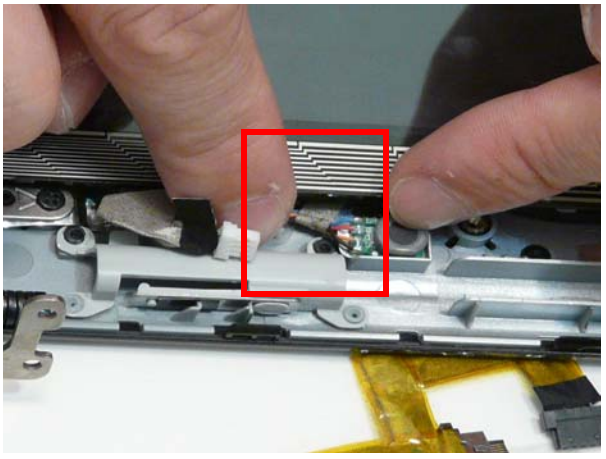
1. Adhere the microphone to the cover.



2. Connect the microphone cable.

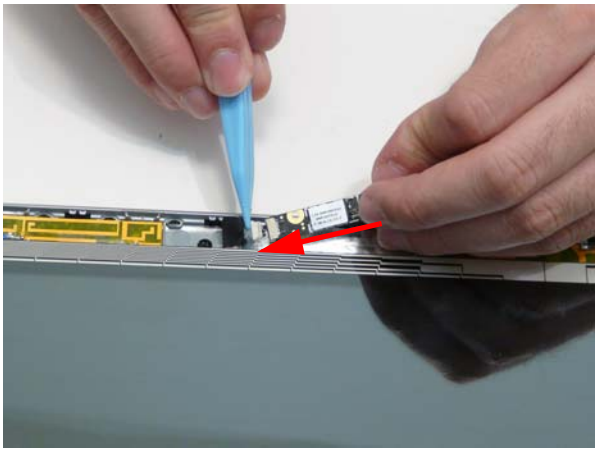


3. Make sure the cable tie is tucked securely under the panel.

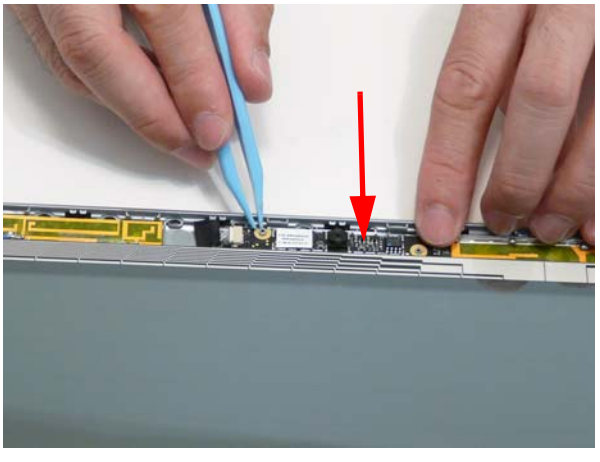


## Replacing the Camera Board

1. Connect the camera board to the connector.



2. Adhere the camera board to the cover.



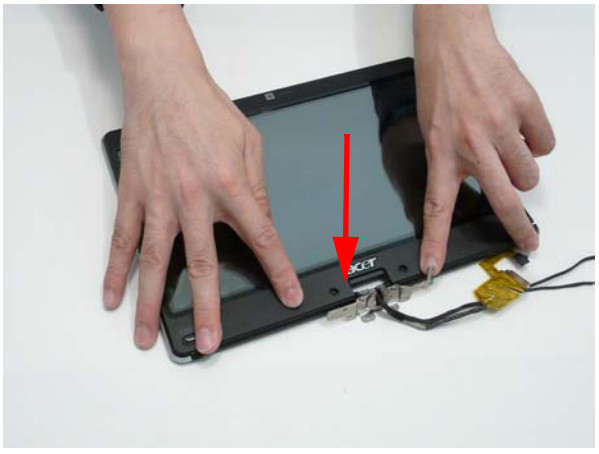
# Replacing the LCD Bezel

1. Place the bezel on the cover.

2. Press down on the bezel top edge.

3. Press down the bezel sides.

4. Press down the bezel bottom edge.

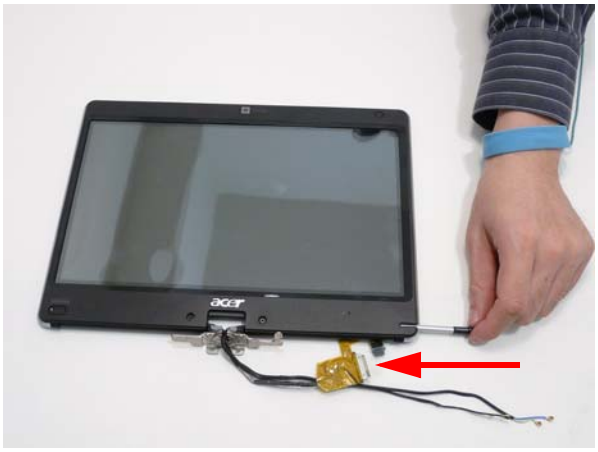


5. Replace the two screws.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| LCD Bezel | M2*5 | 2 | |

6. Replace the screw covers.

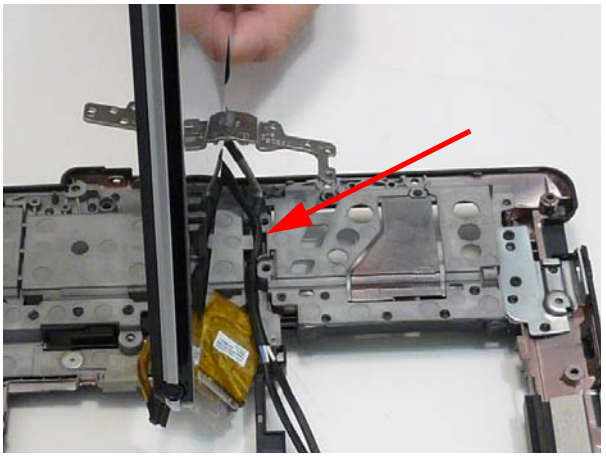
7. Insert the stylus.



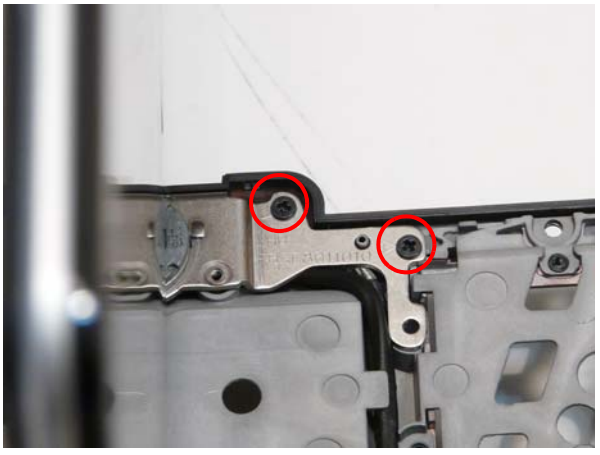
# Main Unit Reassembly Process

## Replacing the LCD Module

1. Lay the cables into the retention guides. The LCD cable first, then antenna cable on top.

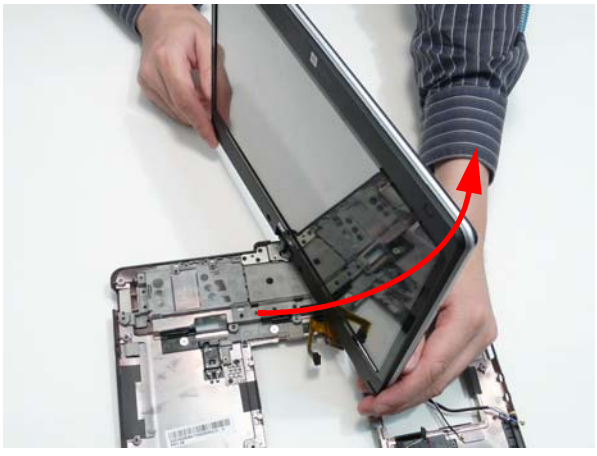


2. Replace the five screws (5).

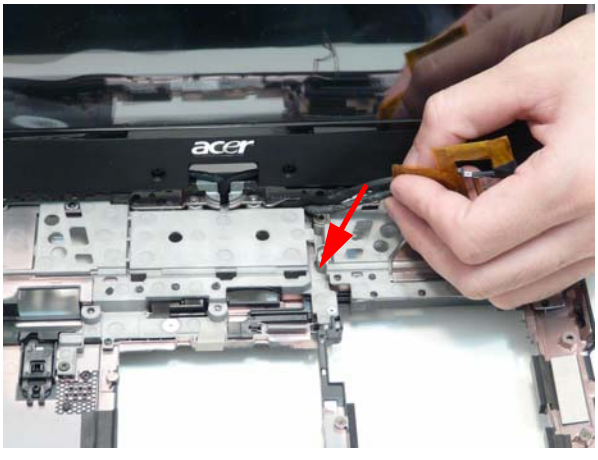


| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| LCD Module | M2*4 | 5 | |

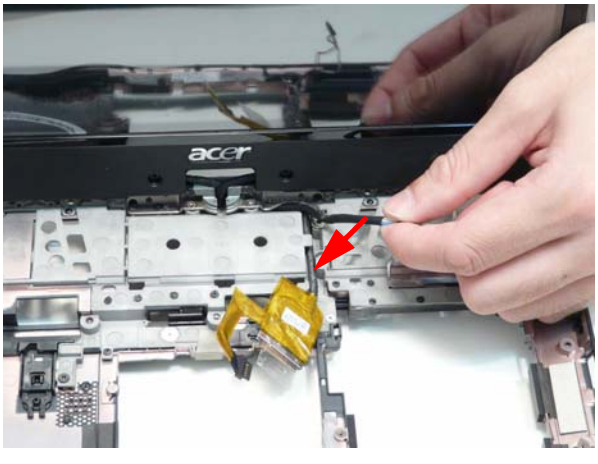
3. Turn the LCD module.



4. Lay the LCD cable in the retention guide.

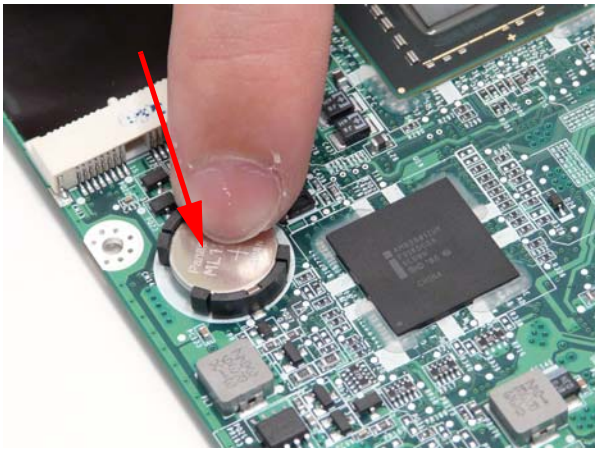



5. Lay the antenna cable in the retention guide.



## Replacing the RTC Battery

1. Push the RTC battery into the holder.



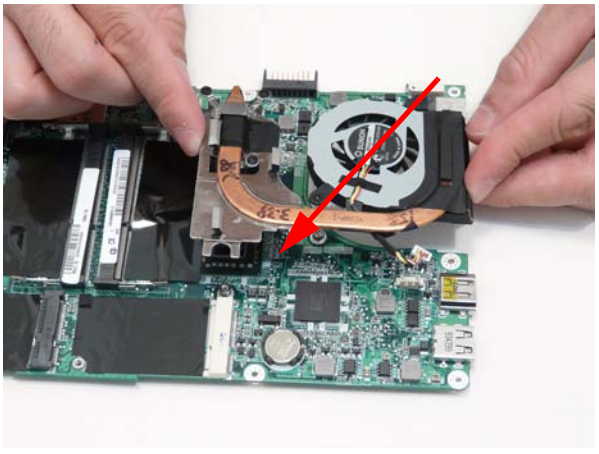
## Replacing the Thermal Module

**IMPORTANT:** Ensure all heat pads are in place before replacing the Thermal Module.

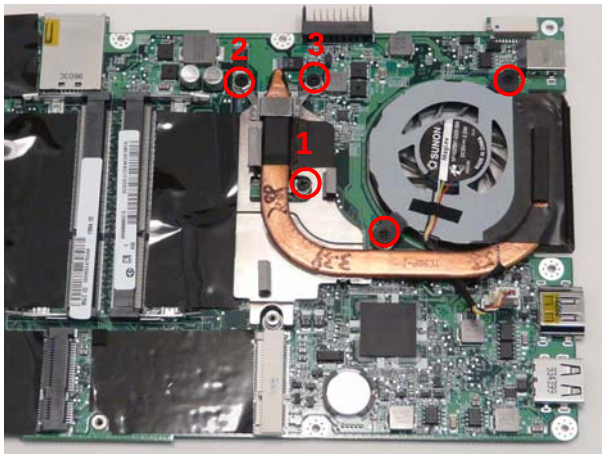
The following thermal pads are approved for use:

- Eapus XR-PE

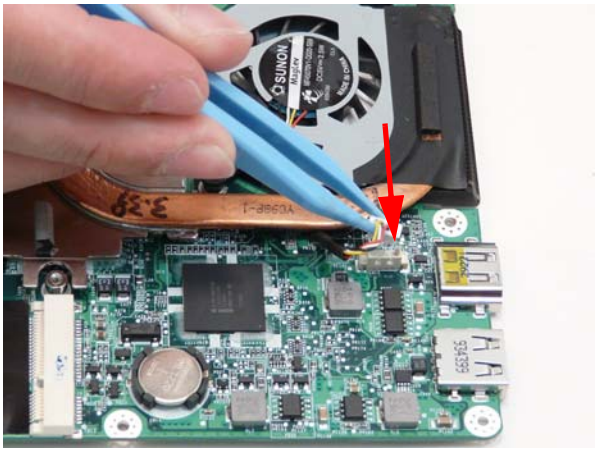
1. Remove all traces of thermal grease or pad adhesive from the CPU and thermal module using a lint-free cloth or cotton swab and Isopropyl Alcohol, Acetone, or other approved cleaning agent.
2. Place the thermal module on the main board.



3. Tighten the five (5) captive screws. First tighten the CPU captive screws in order: 1 then 2 then 3. Then tighten the two (2) other screws.

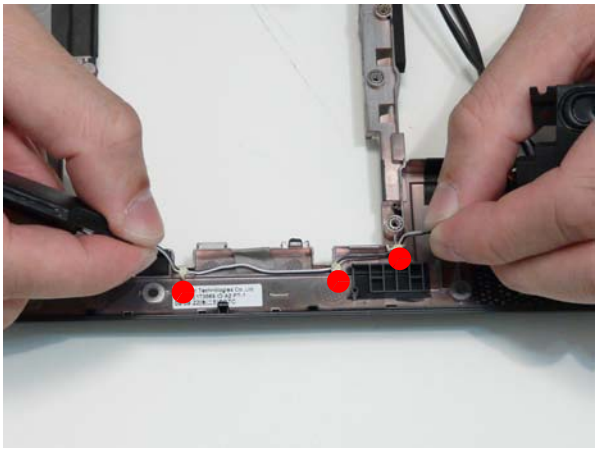



4. Connect the thermal module cable.

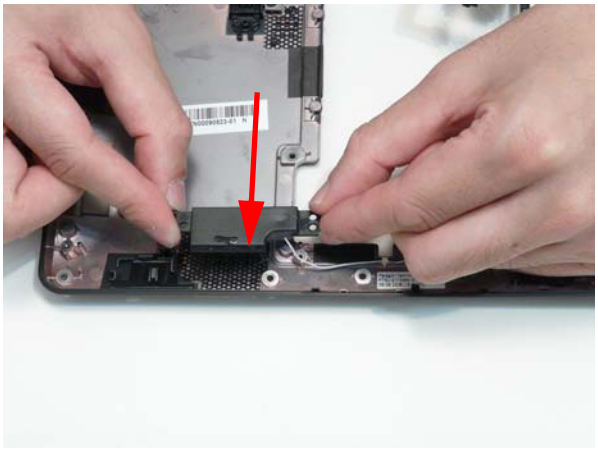


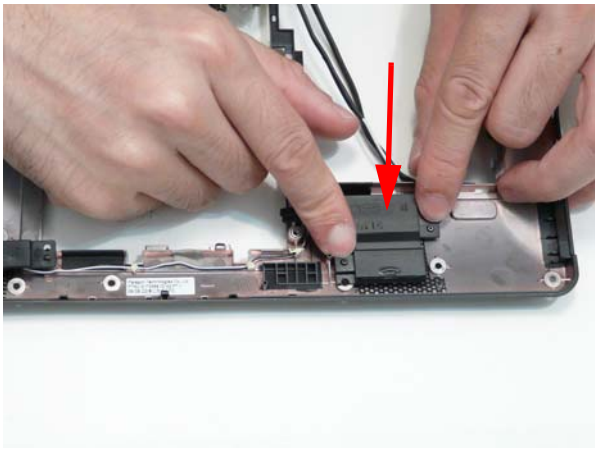
## Replacing the Speakers.

1. Lay the speaker cables into the retention guides and apply glue on the retention guide locations.

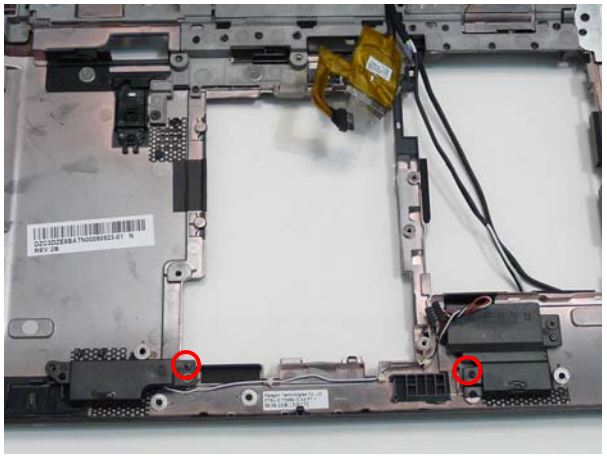


2. Place the speaker modules onto the bottom cover.





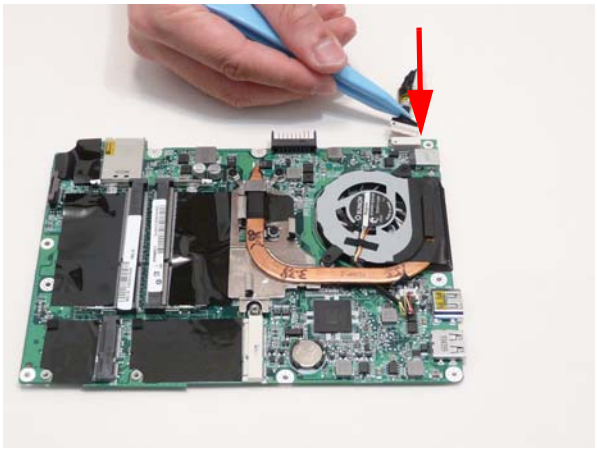
3. Replace the two (2) screws.



| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Speaker | M2*3 | 2 | |

# Replacing the Mainboard

1. Connect the CRT board cable.

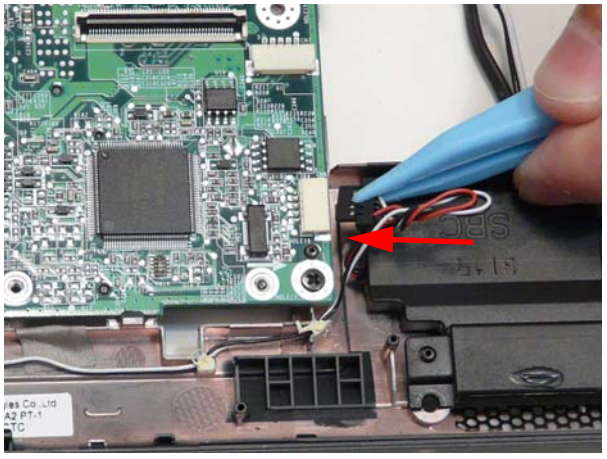


2. Replace the mainboard into the bottom cover inserting the external connector side first.

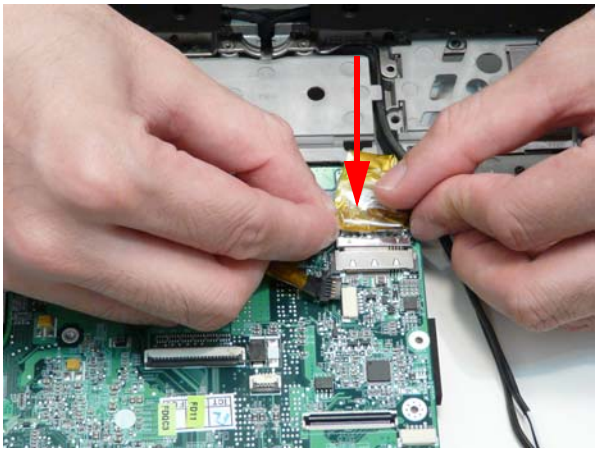
3. Replace the two (2) screws.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Mainboard | M2*4 | 2 | |

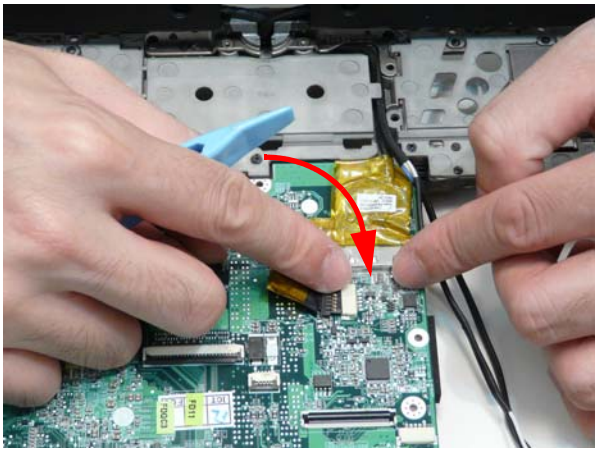
4. Connect the speaker connector.



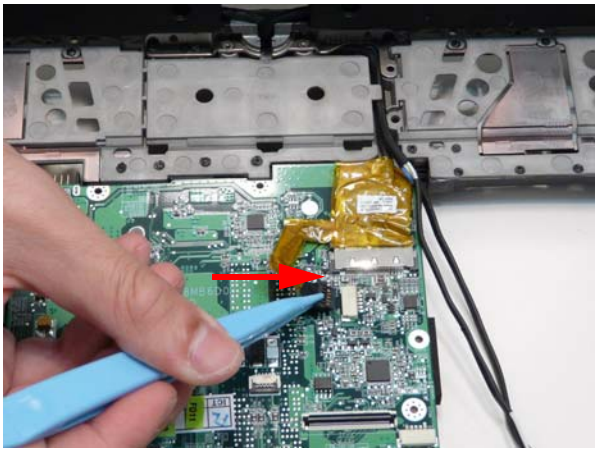
5. Connect the LCD connector.



6. Adhere the clear protective LCD connector cover.

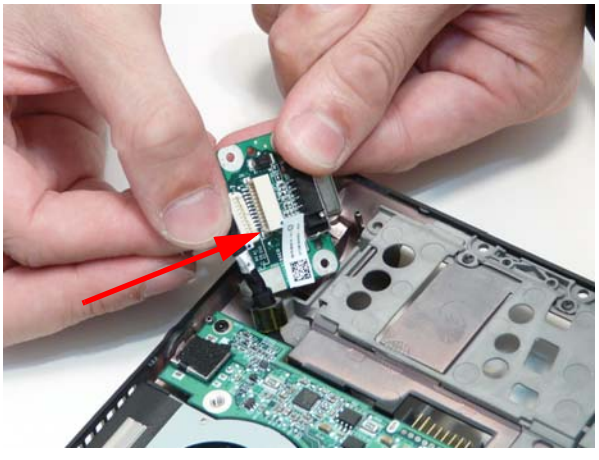


7. Connect the touchscreen cable.

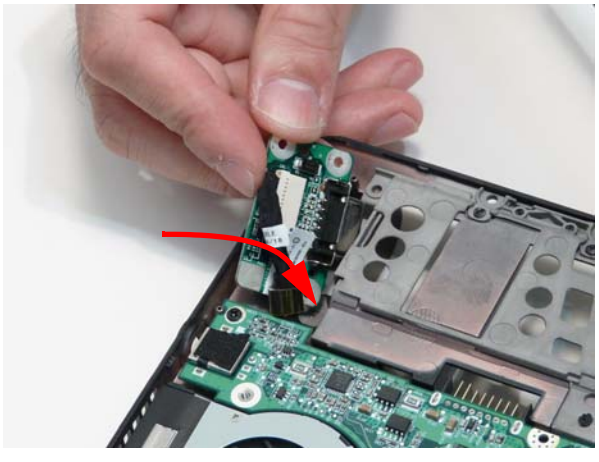


## Replacing the CRT Board.

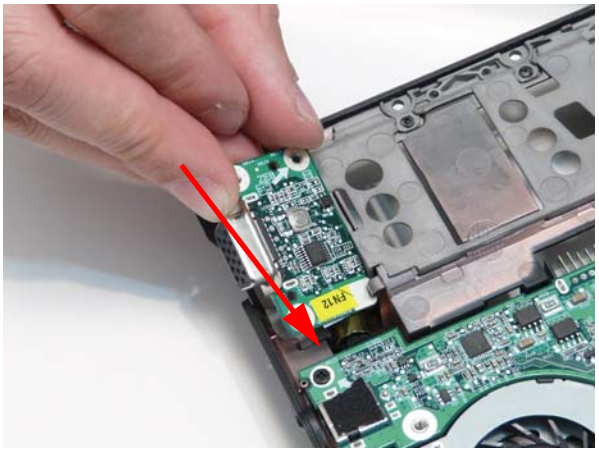
1. Connect the CRT cable.



2. Turn the CRT board over.



3. Place the CRT board into the cover.



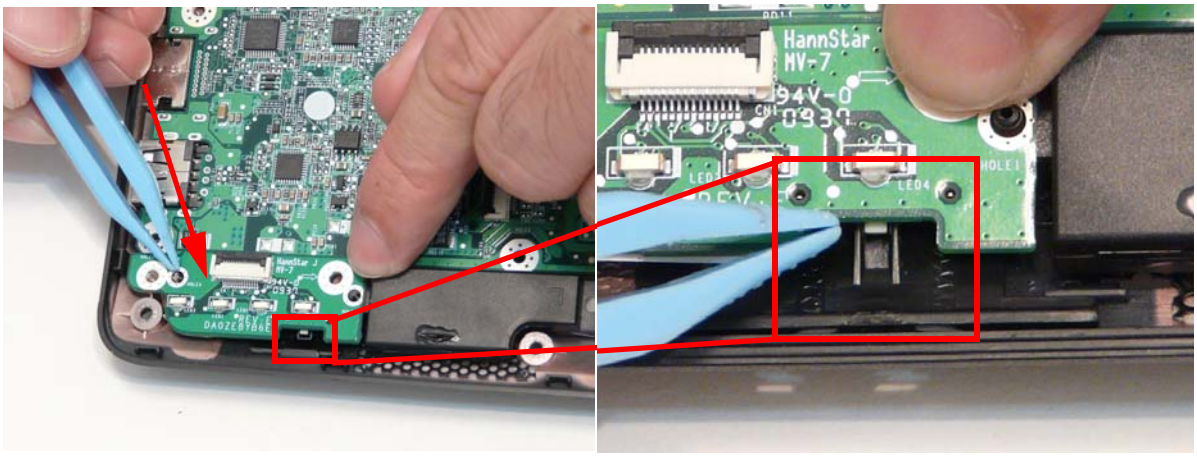
4. Replace the one (1) screw.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| CRT Board | M2*4 | 1 | |

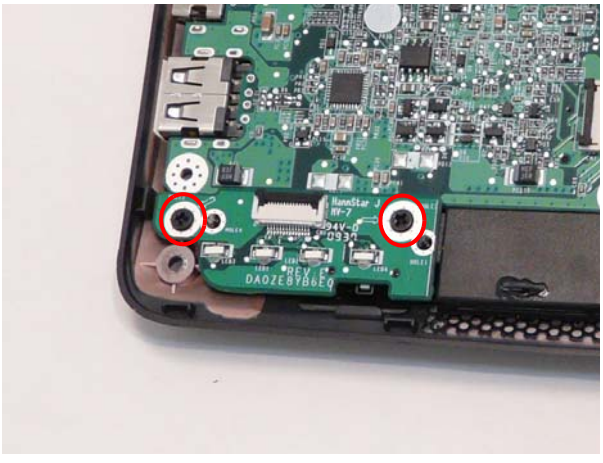
# Replacing the LED Board

1. Place the LED board onto the cover.

**IMPORTANT:**Take special care that the slider switch is properly aligned in the bottom case switch cover.

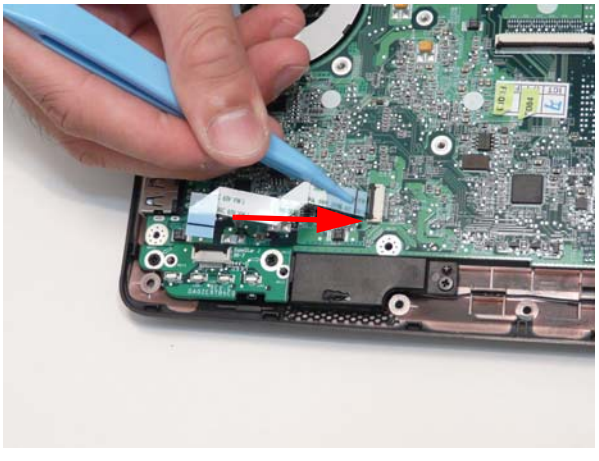



**2.** Replace the two (2) screws.

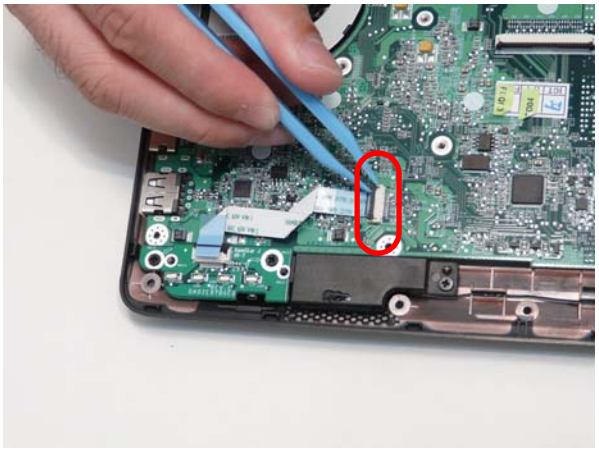


| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| LED Board | M2*4 | 2 | |

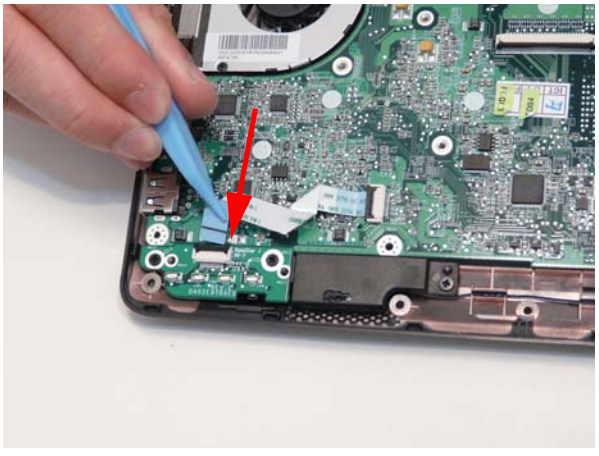
**3.** Replace the LED board cable in the main board connector.



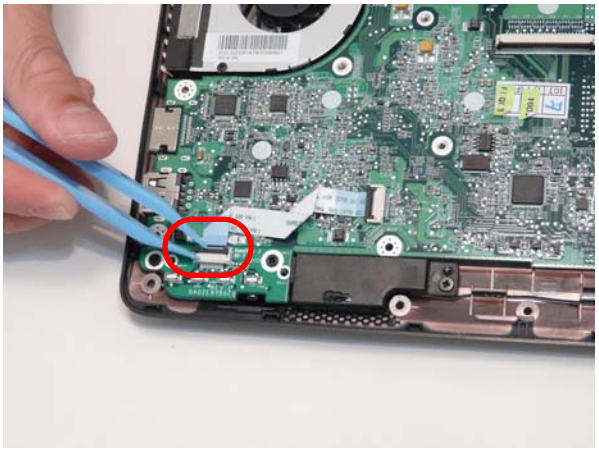
4. Lock the mainboard connector.



5. Replace the LED board cable in the LED board connector.

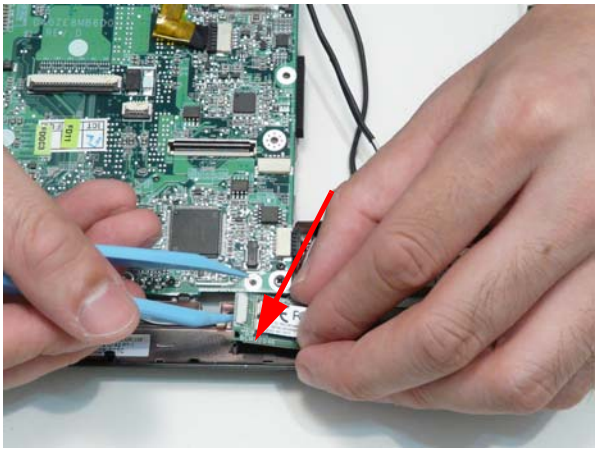


6. Lock the LED board connector.

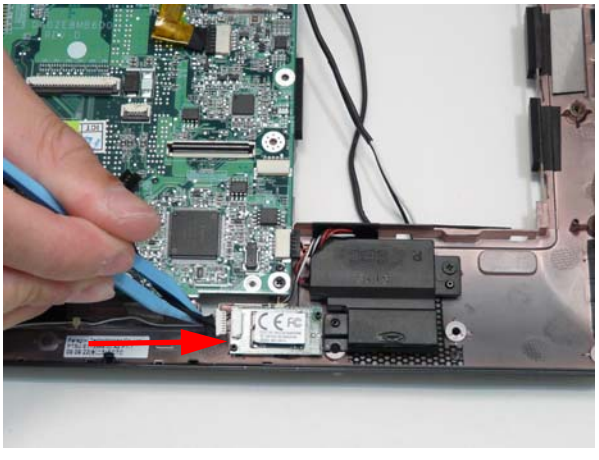


# Replacing the Bluetooth Module

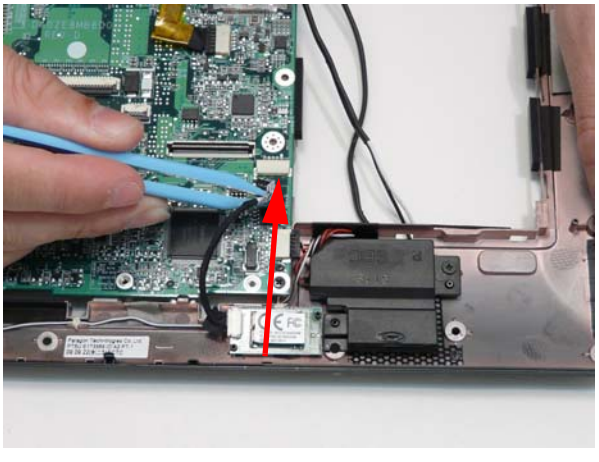
1. Adhere the Bluetooth module to the bottom cover.



2. Connect the Bluetooth cable to the Bluetooth module.



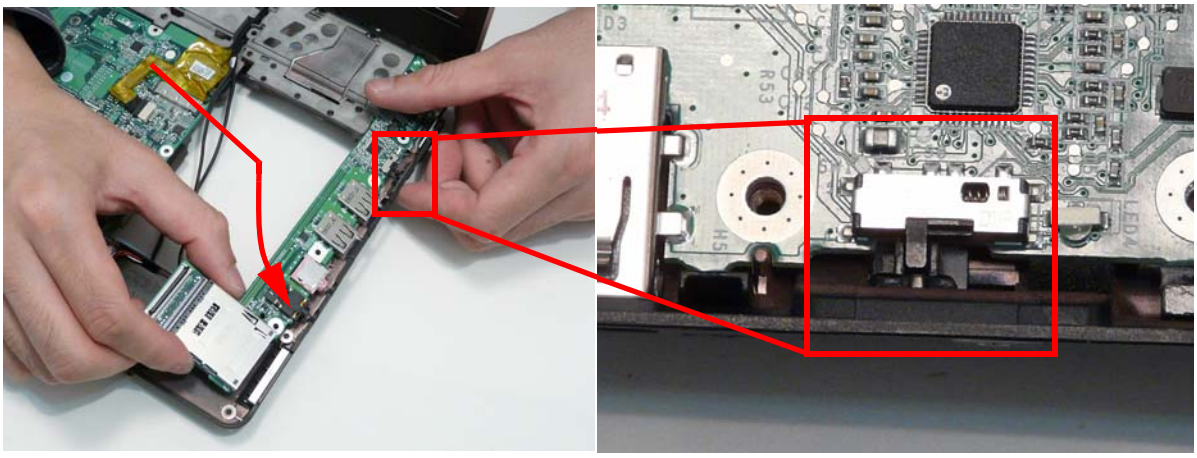
3. Connect the Bluetooth cable to the main board.



# Replacing the I/O Board

1. Replace the I/O board inserting the external port side first.

**NOTE:** Ensure the power slide switch is properly aligned in the switch cover.

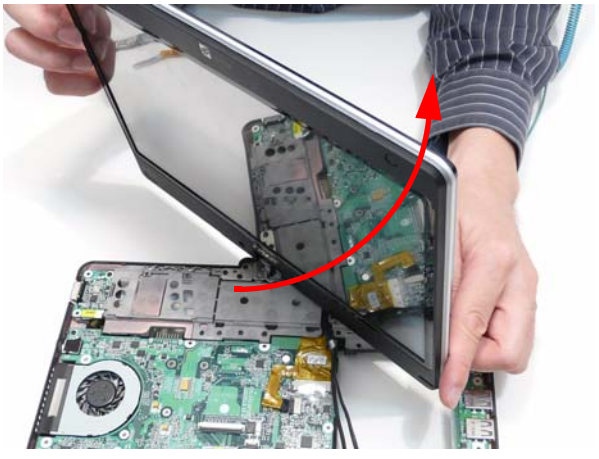


2. Turn the LCD module.

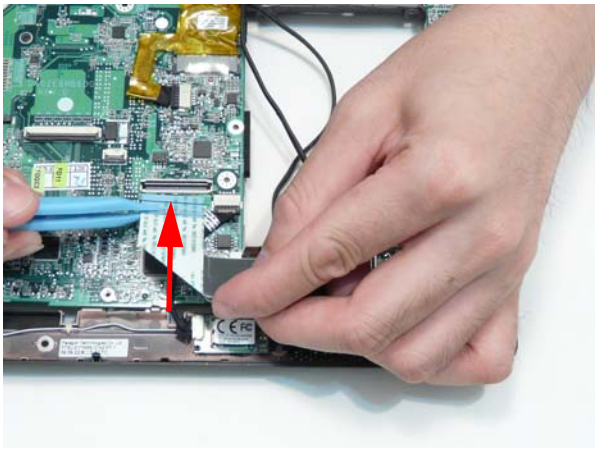
3. Replace the one (1) screw.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| I/O Board | M2*4 | 1 | |

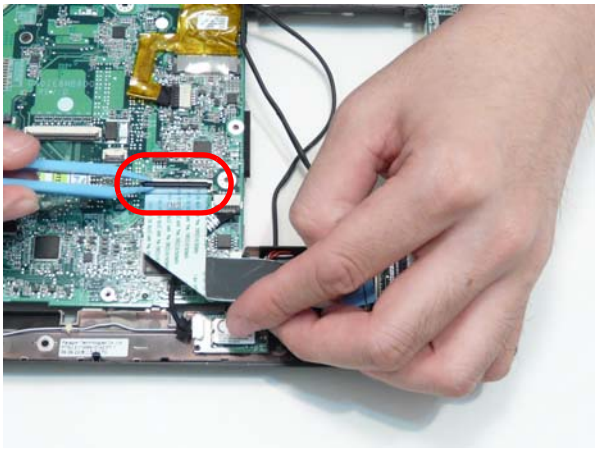
4. Turn the LCD module.



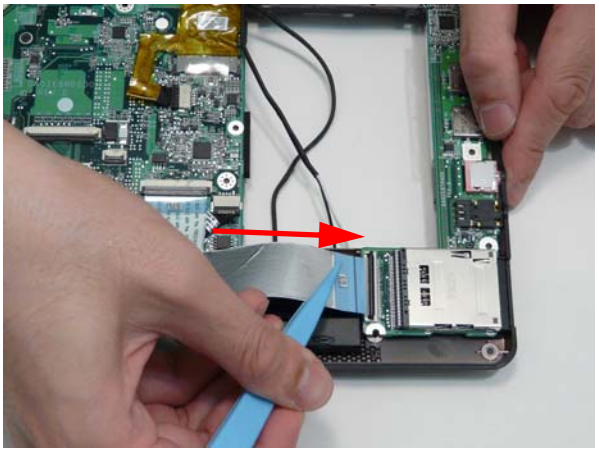
5. Replace the I/O cable in the main board connector.



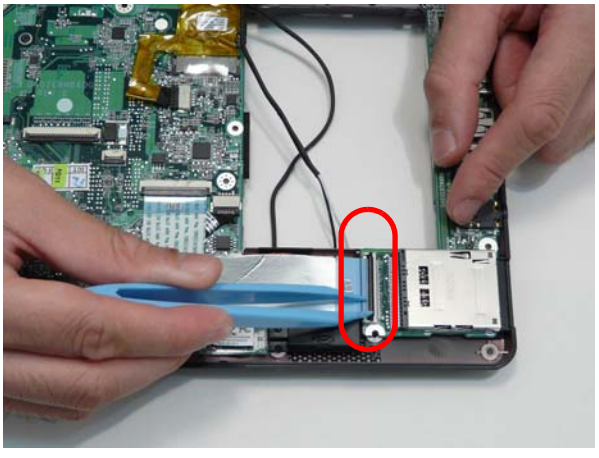
6. Lock the main board connector.



7. Replace the I/O cable in the IO board.

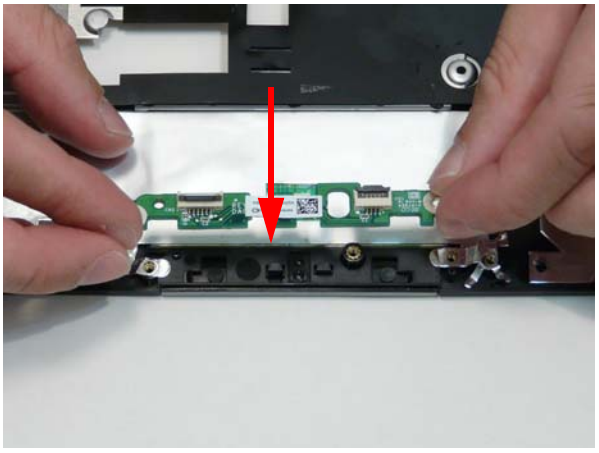


8. Lock the I/O board connector.

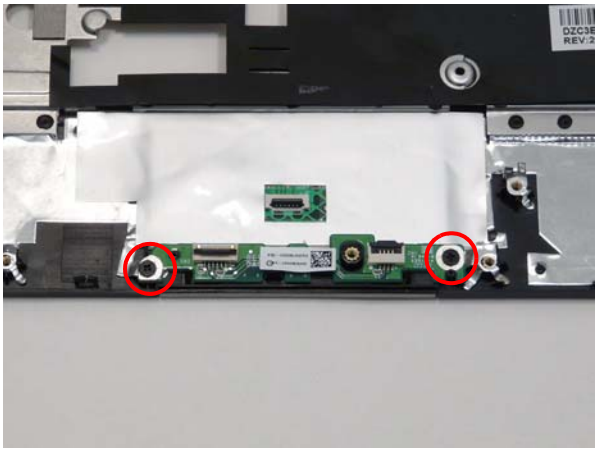


# Replacing the Button Board

1. Replace the button board.

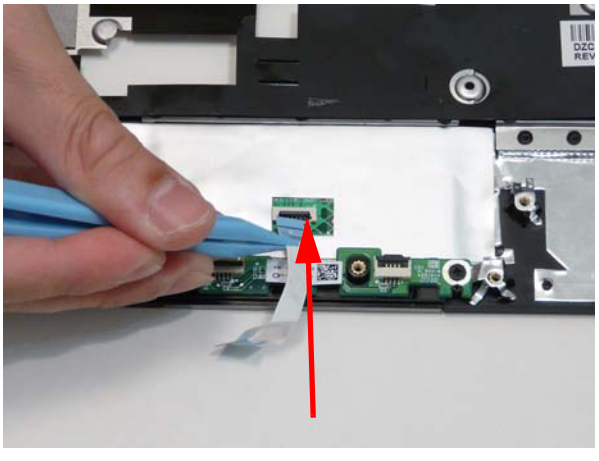


2. Replace the two (2) screws.

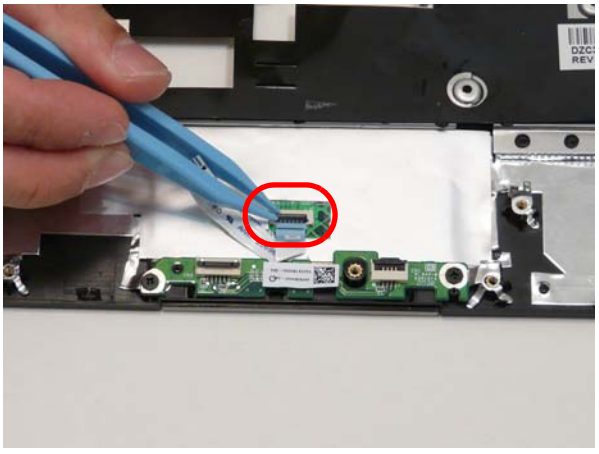


| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Button Board | M2*3 | 2 | |

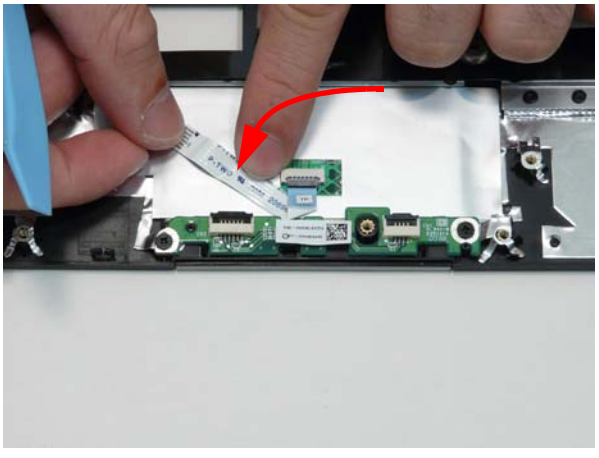
3. Replace the touchpad cable in the touchpad connector.



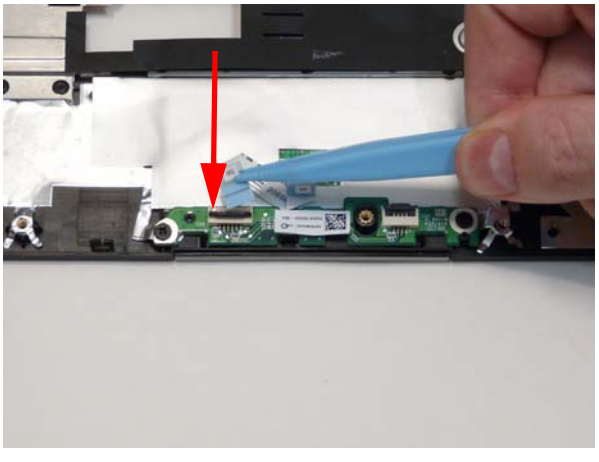
4. Lock the touchpad connector.



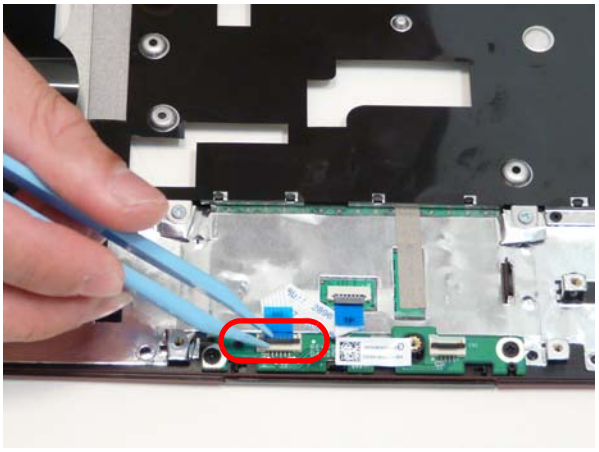
5. Adhere the touchpad cable to the upper cover.



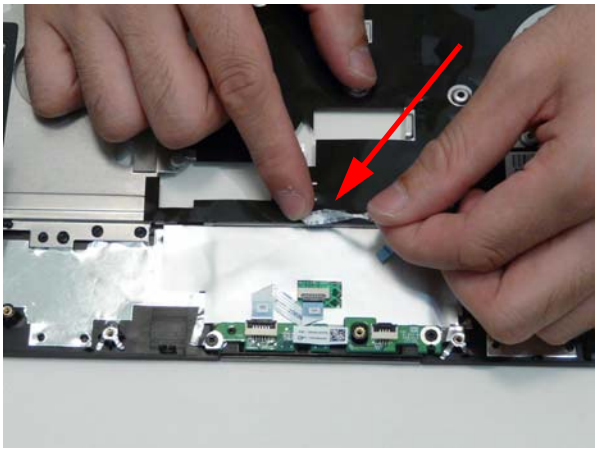
6. Replace the touchpad cable in the button board connector.



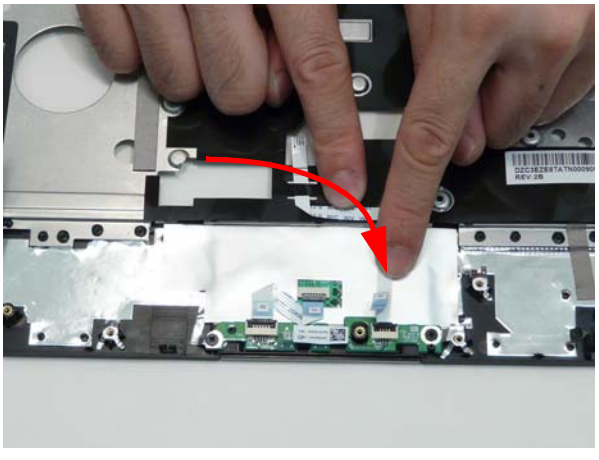
7. Lock the button board connector.



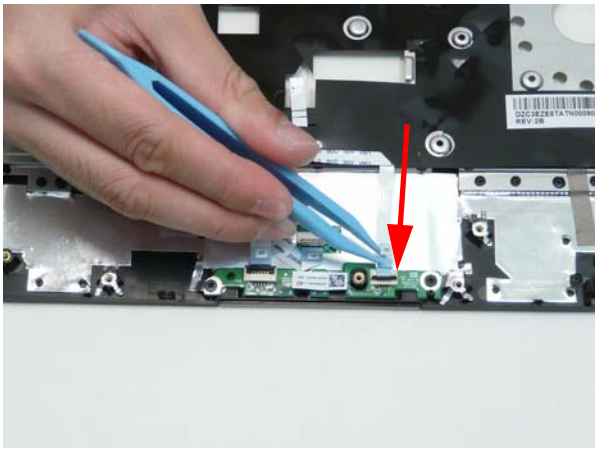
8. Replace the button board cable.



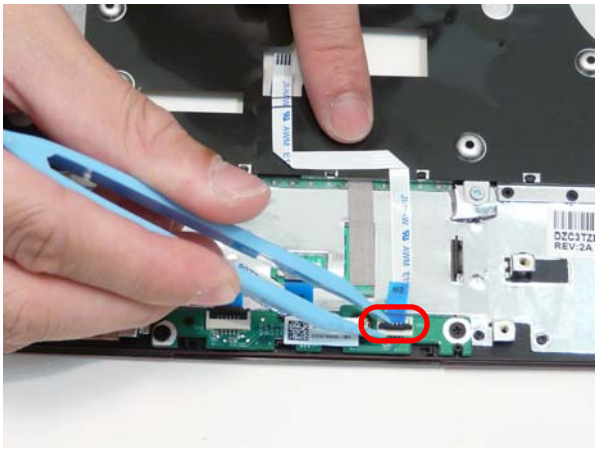
9. Adhere the button board cable to the upper cover.



10. Connect the button board cable to the button board connector.

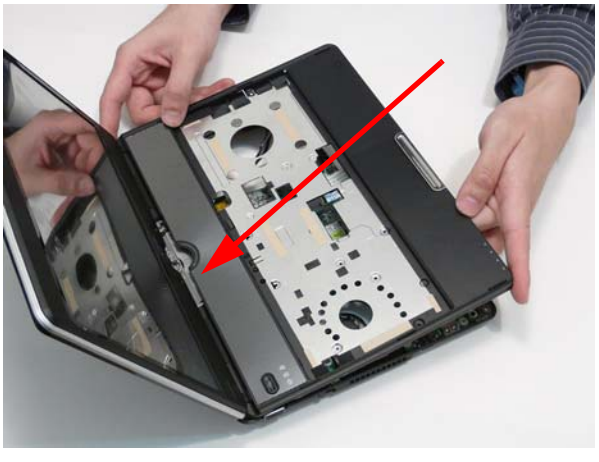


11. Lock the button board connector.



## Replacing the Upper Cover

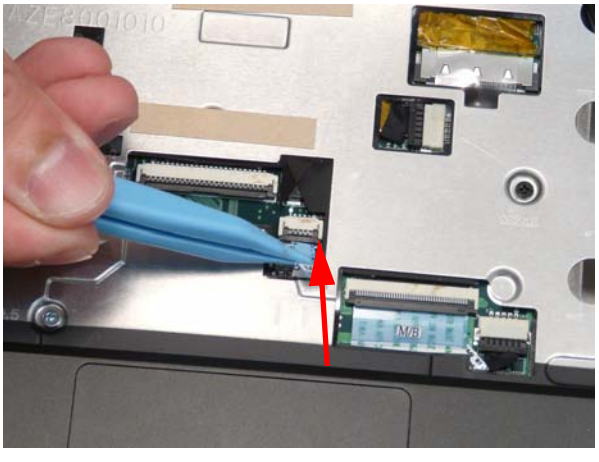
1. Replace the upper cover.



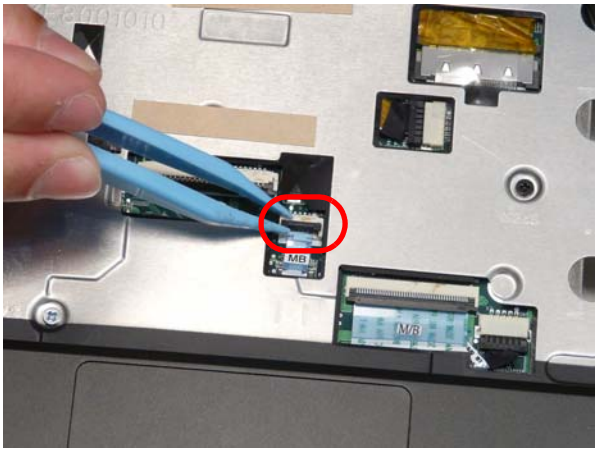
2. Press down on the left and right sides of the upper cover.

3. Press down on the bottom edge of the upper cover

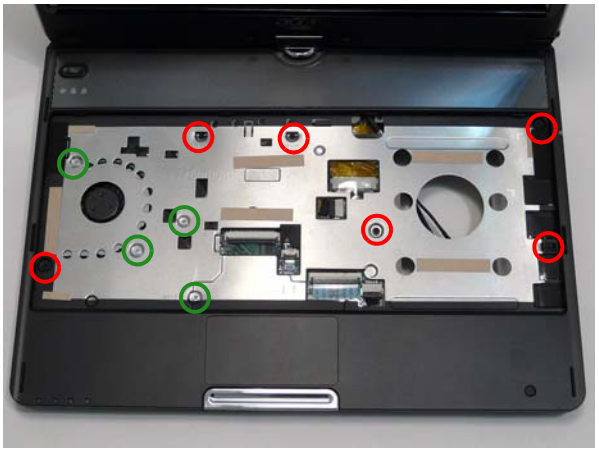
4. Connect the button board cable.



5. Lock the button board cable.

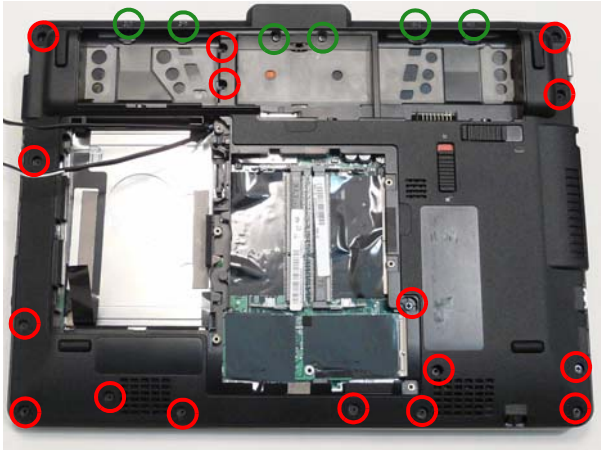


6. Replace the ten (10) screws in the upper cover.



| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Upper Cover | M2*5 (Red Call Out) | 6 | |
| | M2*2.5 (Green Call Out) | 4 | |

7. Turn the computer over and replace the twenty-two (22) screws in the lower cover.



| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Lower Cover | M2*5 (Red Call Out) | 16 | |
| | M2*4 (Green Call Out) | 6 | |

## Replacing the Hinge Covers

1. Replace the hinge bezel.

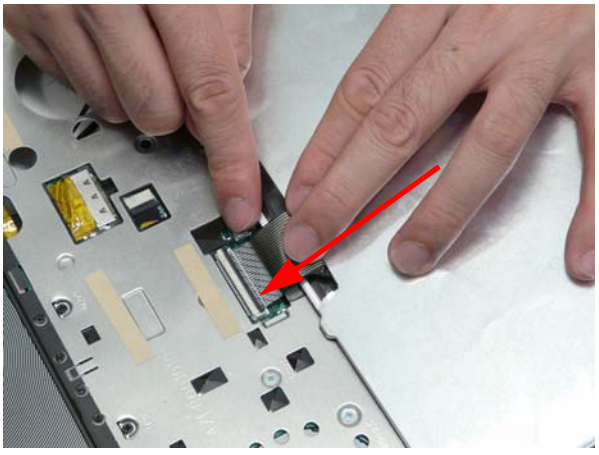
2. Replace the hinge cap.

3. Replace the three (3) screws.

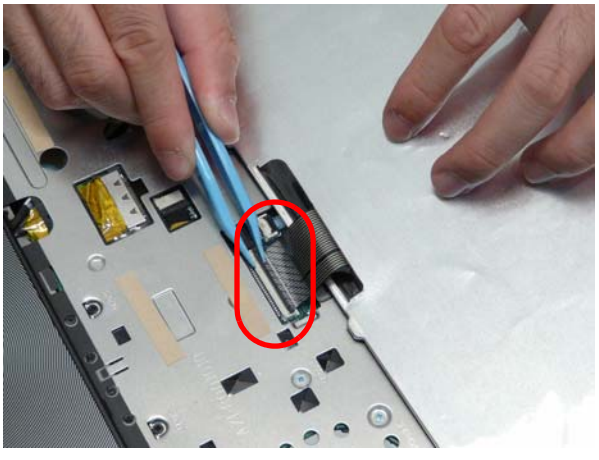
| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| Hinge Covers | M2*3 | 3 | |

# Replacing the Keyboard

1. Replace the keyboard FPC.



2. Lock the keyboard FPC.



3. Flip the keyboard over and insert the front edge of the keyboard.

4. Press down the keyboard top edge.

## Replacing the 3G Module

1. Replace the 3G module.

2. Replace the one (1) screw.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| 3G Module | M2*3 | 1 | |

3. Connect the cables (Blue cable connects to Aux).

# Replacing the WLAN Module

1. Replace the WLAN card.

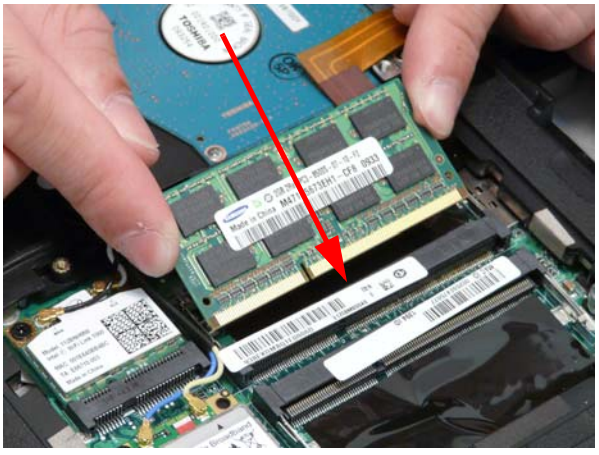
2. Replace the one (1) screw.

| Step | Screw | Quantity | Screw Type. |
|---|---|---|---|
| WLAN | M2*3 | 1 | |

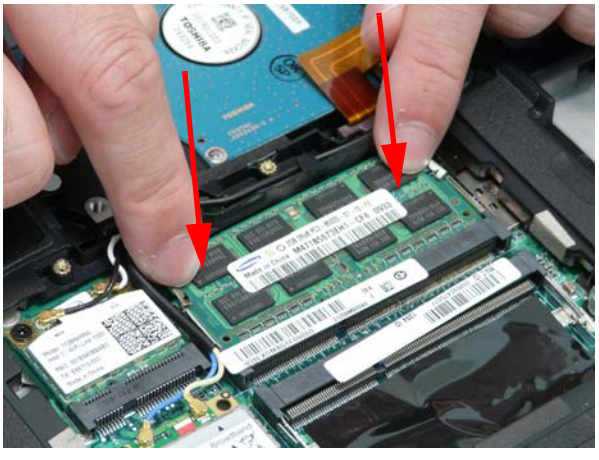
3. Connect the cables (Black cable connects to Main).

## Replacing the DIMM

1. Replace the DIMM module.

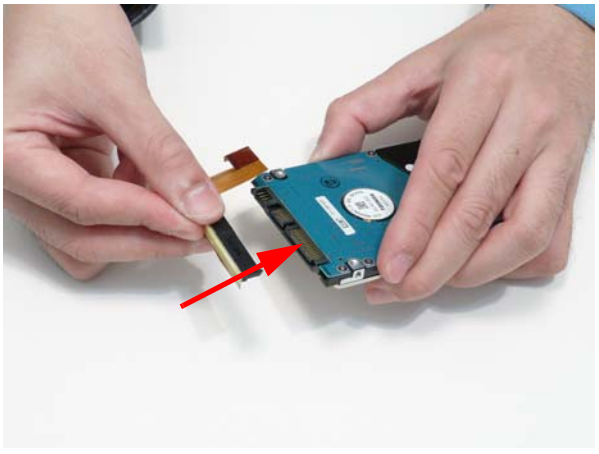


2. Press down the DIMM module to lock into place.

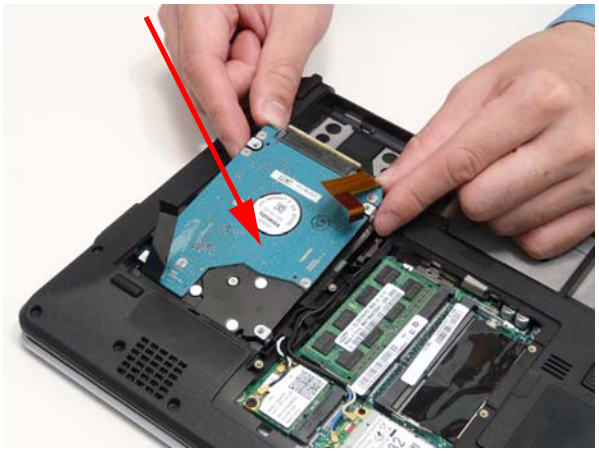


## Replacing the Hard Disk Drive

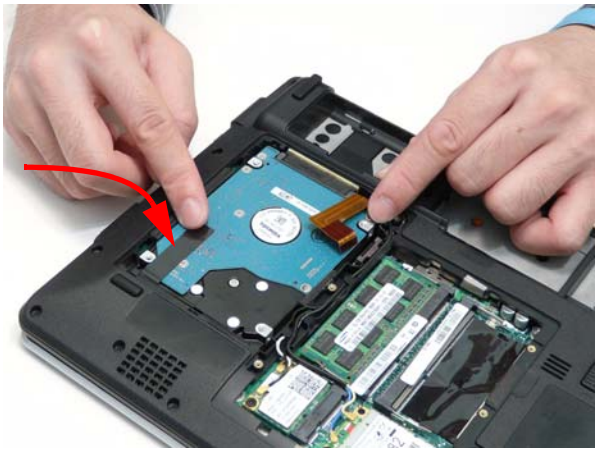
1. Replace the HDD FPC.



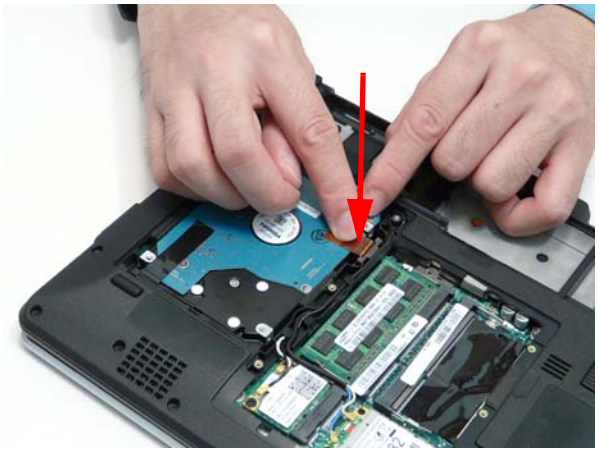
2. Replace the HDD in the bay.



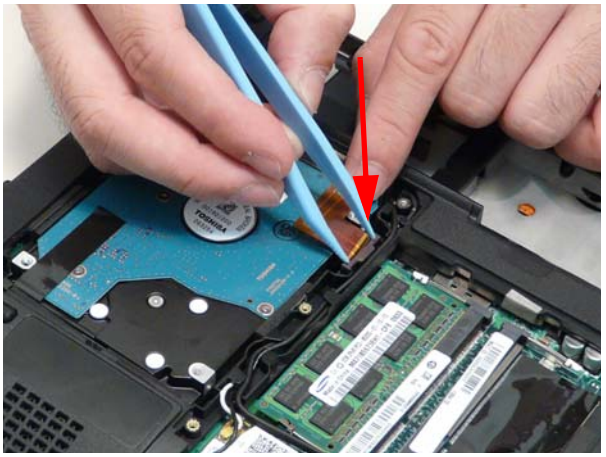
3. Adhere the black tape.



4. Replace the HDD FPC.

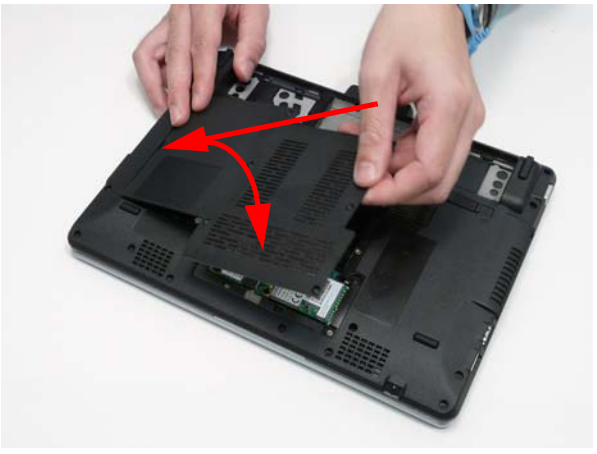


5. Lock the HDD FPC.



## Replacing the Module Cover

1. Insert the side of the module cover into the slots.



2. Replace the module, pressing firmly around the edges.

3. Tighten the six (6) captive screws.

## Replacing the SIM Card

1. Insert the SIM card into the slot.

## Replacing the Battery

1. Insert the battery outer edge into the slots.

2. Push the battery down into place.

3. Lock the battery.

## Replacing the Dummy Card

1. Insert the dummy card into the slot.

# Troubleshooting

## Common Problems

Use the following procedure as a guide for computer problems.

**NOTE:** The diagnostic tests are intended to test only Acer products. Non-Acer products, prototype cards, or modified options can give false errors and invalid system responses.

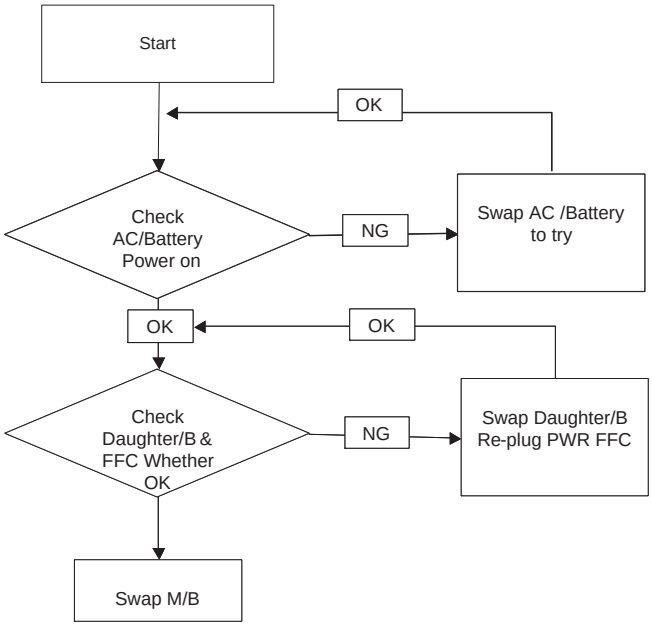
1. Obtain the failing symptoms in as much detail as possible.
2. Verify the symptoms by attempting to re-create the failure by running the diagnostic test or by repeating the same operation.
3. Use the following table with the verified symptom to determine which page to go to.

| Symptoms (Verified) | Go To |
|---|---|
| Power On Issue | Page 144 |
| No Display Issue | Page 145 |
| LCD Failure | Page 147 |
| Internal Keyboard Failure | Page 148 |
| TouchPad Failure | Page 149 |
| Internal Speaker Failure | Page 150 |
| Internal Microphone Failure | Page 151 |
| USB Failure | Page 153 |
| Other Function Failure | Page 153 |

4. If the Issue is still not resolved, see “Online Support Information” on page 165.

# Power On Issue

If the system doesn't power on, perform the following actions one at a time to correct the problem. Do not replace non-defective FRUs:



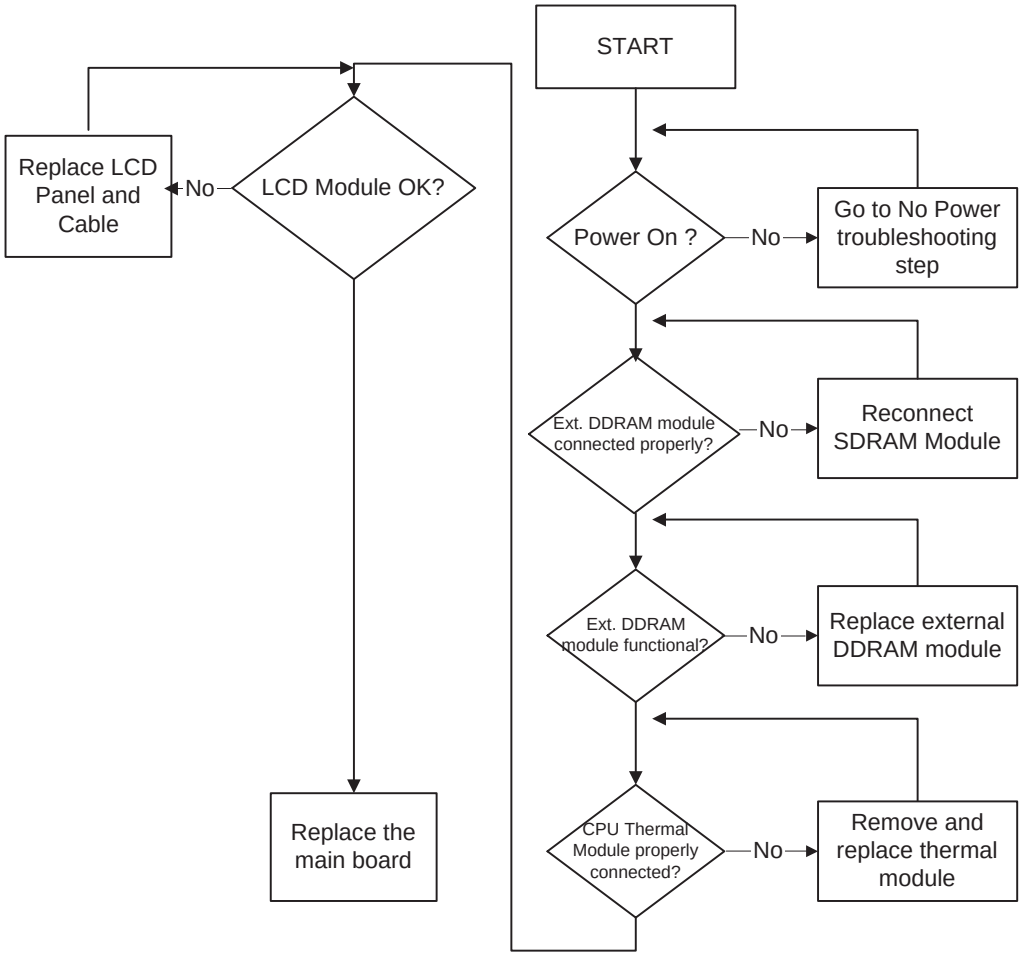

## Computer Shuts down Intermittently

If the system powers off at intervals, perform the following actions one at a time to correct the problem.

1. Check the power cable is properly connected to the computer and the electrical outlet.
2. Remove any extension cables between the computer and the outlet.
3. Remove any surge protectors between the computer and the electrical outlet. Plug the computer directly into a known good electrical outlet.
4. Remove all external and non-essential hardware connected to the computer that are not necessary to boot the computer to the failure point.
5. Remove any recently installed software.
6. If the Issue is still not resolved, see "Online Support Information" on page 165.

# No Display Issue

If the **Display** doesn't work, perform the following actions one at a time to correct the problem. Do not replace non-defective FRUs:




# No POST or Video

If the POST or video doesn't display, perform the following actions one at a time to correct the problem.

1. Make sure that the internal display is selected. On this notebook model, switching between the internal display and the external display is done by pressing **Fn+F5**. Reference Product pages for specific model procedures.
2. Make sure the computer has power by checking at least one of the following occurs:
   - Fans start up
   - Status LEDs light up

   If there is no power, see "Power On Issue" on page 144.
3. Drain any stored power by removing the power cable and battery and holding down the power button for 10 seconds. Reconnect the power and reboot the computer.
4. Connect an external monitor to the computer and switch between the internal display and the external display is by pressing **Fn+F5** (on this model).

   If the POST or video appears on the external display, see "LCD Failure" on page 147.
5. Disconnect power and all external devices including port replicators or docking stations. Remove any memory cards and CD/DVD discs. Restart the computer.

If the computer boots correctly, add the devices one by one until the failure point is discovered.

6. Reseat the memory modules.
7. Remove the drives (see “Disassembly Process” on page 34).
8. If the Issue is still not resolved, see “Online Support Information” on page 165.

## Abnormal Video Display

If video displays abnormally, perform the following actions one at a time to correct the problem.

1. Reboot the computer.
2. If permanent vertical/horizontal lines or dark spots display in the same location, the LCD is faulty and should be replaced. See “Disassembly Process” on page 34.
3. If extensive pixel damage is present (different colored spots in the same locations on the screen), the LCD is faulty and should be replaced. See “Disassembly Process” on page 34.
4. Adjust the brightness to its highest level. See the User Manual for instructions on adjusting settings.

   **NOTE:** Ensure that the computer is not running on battery alone as this may reduce display brightness.

   If the display is too dim at the highest brightness setting, the LCD is faulty and should be replaced. See “Disassembly Process” on page 34.
5. Check the display resolution is correctly configured:
   a. Minimize or close all Windows.
   b. If display size is only abnormal in an application, check the view settings and control/mouse wheel zoom feature in the application.
   c. If desktop display resolution is not normal, right-click on the desktop and select **Personalize→ Display Settings**.
   d. Click and drag the Resolution slider to the desired resolution.
   e. Click **Apply** and check the display. Readjust if necessary.
6. Roll back the video driver to the previous version if updated.
7. Remove and reinstall the video driver.
8. Check the Device Manager to determine that:
   - The device is properly installed. There are no red Xs or yellow exclamation marks.
   - There are no device conflicts.
   - No hardware is listed under Other Devices.
9. If the Issue is still not resolved, see “Online Support Information” on page 165.
10. Run the Windows Memory Diagnostic from the operating system DVD and follow the onscreen prompts.
11. If the Issue is still not resolved, see “Online Support Information” on page 165.

# Random Loss of BIOS Settings

If the computer is experiencing intermittent loss of BIOS information, perform the following actions one at a time to correct the problem.

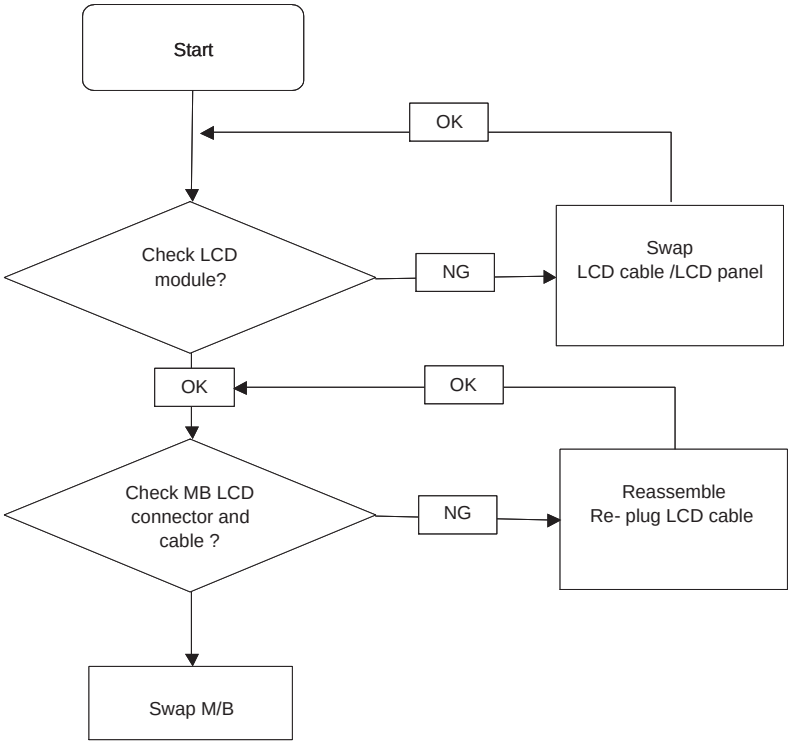
1. If the computer is more than one year old, replace the CMOS battery.
2. Run a complete virus scan using up-to-date software to ensure the computer is virus free.
3. If the computer is experiencing HDD or ODD BIOS information loss, disconnect and reconnect the power and data cables between devices.

   If the BIOS settings are still lost, replace the cables.
4. If HDD information is missing from the BIOS, the drive may be defective and should be replaced.
5. Replace the Motherboard.

6. If the Issue is still not resolved, see “Online Support Information” on page 165.

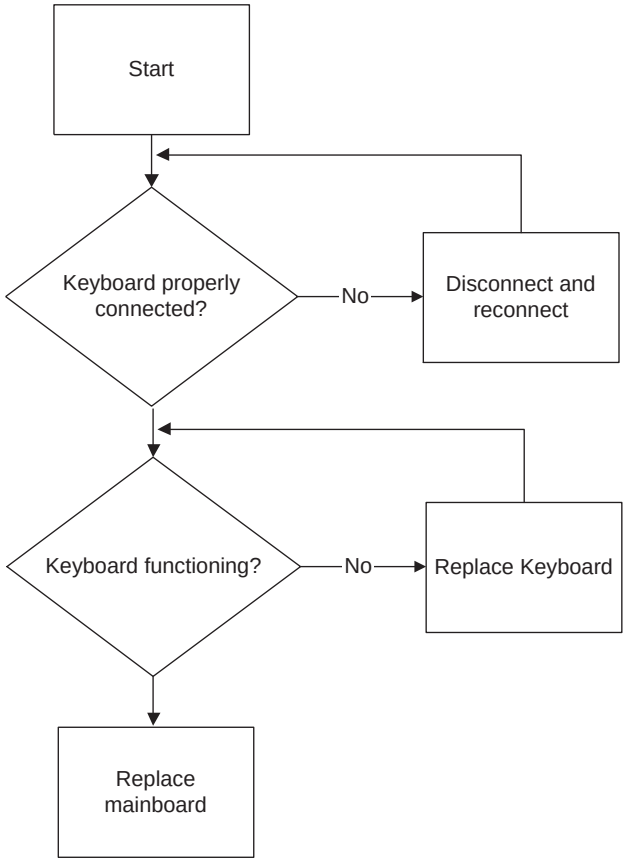
# LCD Failure

If the **LCD** fails, perform the following actions one at a time to correct the problem. Do not replace non-defective FRUs:



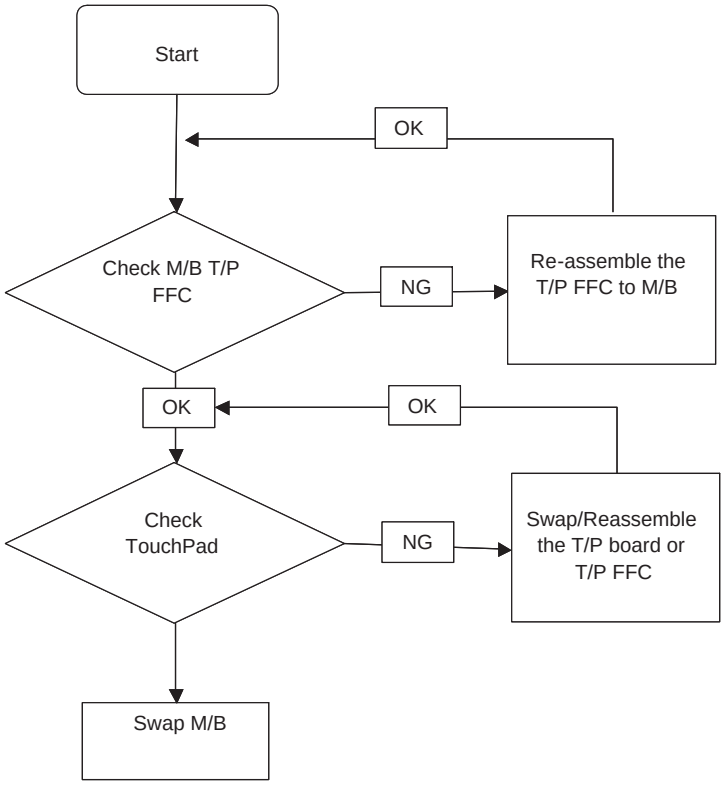
# Built-In Keyboard Failure

If the built-in **Keyboard** fails, perform the following actions one at a time to correct the problem. Do not replace non-defective FRUs:



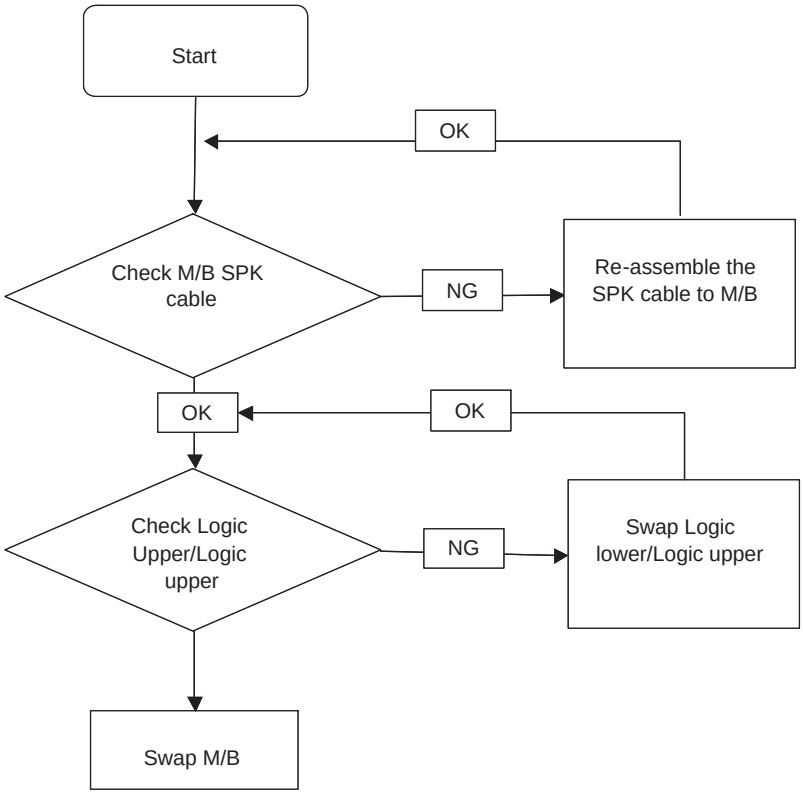
# TouchPad Failure

If the **TouchPad** doesn't work, perform the following actions one at a time to correct the problem. Do not replace non-defective FRUs:



# Internal Speaker Failure

If the internal **Speakers** fail, perform the following actions one at a time to correct the problem. Do not replace non-defective FRUs:




## Sound Problems

If sound problems are experienced, perform the following actions one at a time to correct the problem.

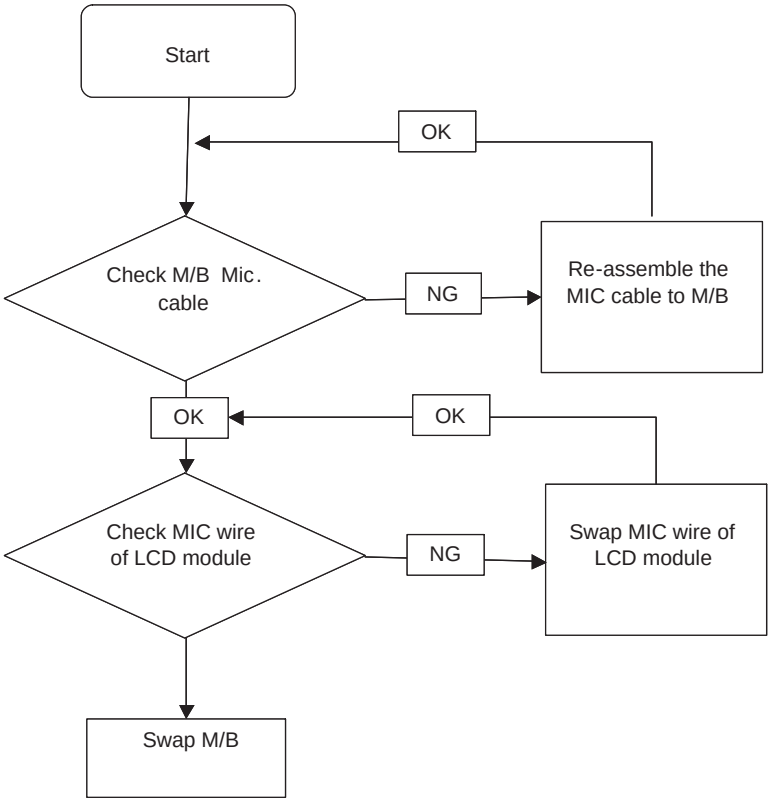
1. Reboot the computer.
2. Navigate to **Start**→ **Control Panel**→ **System and Maintenance**→ **System**→ **Device Manager**. Check the Device Manager to determine that:
   - The device is properly installed.
   - There are no red Xs or yellow exclamation marks.
   - There are no device conflicts.
   - No hardware is listed under Other Devices.
3. Roll back the audio driver to the previous version, if updated recently.
4. Remove and reinstall the audio driver.
5. Ensure that all volume controls are set mid range:
   a. Click the volume icon on the taskbar and drag the slider to 50. Ensure that the volume is not muted.
   b. Click Mixer to verify that other audio applications are set to 50 and not muted.
6. Navigate to **Start**→ **Control Panel**→ **Hardware and Sound**→ **Sound**. Ensure that Speakers are selected as the default audio device (green check mark).
   **NOTE:** If Speakers does not show, right-click on the **Playback** tab and select **Show Disabled Devices** (clear by default).
7. Select Speakers and click **Configure** to start **Speaker Setup**. Follow the onscreen prompts to configure the speakers.

8. Remove and recently installed hardware or software.
9. Restore system and file settings from a known good date using **System Restore**.

   If the issue is not fixed, repeat the preceding steps and select an earlier time and date.
10. Reinstall the Operating System.
11. If the Issue is still not resolved, see “Online Support Information” on page 165.

# Internal Microphone Failure

If the internal **Microphone** fails, perform the following actions one at a time to correct the problem. Do not replace non-defective FRUs:




## Microphone Problems

If internal or external **Microphones** do no operate correctly, perform the following actions one at a time to correct the problem.

1. Check that the microphone is enabled. Navigate to **Start**→ **Control Panel**→ **Hardware and Sound**→ **Sound** and select the **Recording** tab.
2. Right-click on the **Recording** tab and select **Show Disabled Devices** (clear by default).
3. The microphone appears on the **Recording** tab.
4. Right-click on the microphone and select **Enable**.
5. Select the microphone then click **Properties**. Select the **Levels** tab.
6. Increase the volume to the maximum setting and click **OK**.
7. Test the microphone hardware:
   a. Select the microphone and click **Configure**.
   b. Select **Set up microphone**.

c. Select the microphone type from the list and click **Next**.

d. Follow the onscreen prompts to complete the test.

8. If the Issue is still not resolved, see “Online Support Information” on page 165.

# HDD Not Operating Correctly

If the **HDD** does not operate correctly, perform the following actions one at a time to correct the problem.

1. Disconnect all external devices.
2. Run a complete virus scan using up-to-date software to ensure the computer is virus free.
3. Run the Windows 7 Startup Repair Utility:
   a. insert the Windows 7 Operating System DVD in the ODD and restart the computer.
   b. When prompted, press any key to start to the operating system DVD.
   c. The **Install Windows** screen displays. Click **Next**.
   d. Select **Repair your computer**.
   e. The **System Recovery Options** screen displays. Click **Next**.
   f. Select the appropriate operating system, and click **Next**.

   **NOTE:** Click **Load Drivers** if controller drives are required.

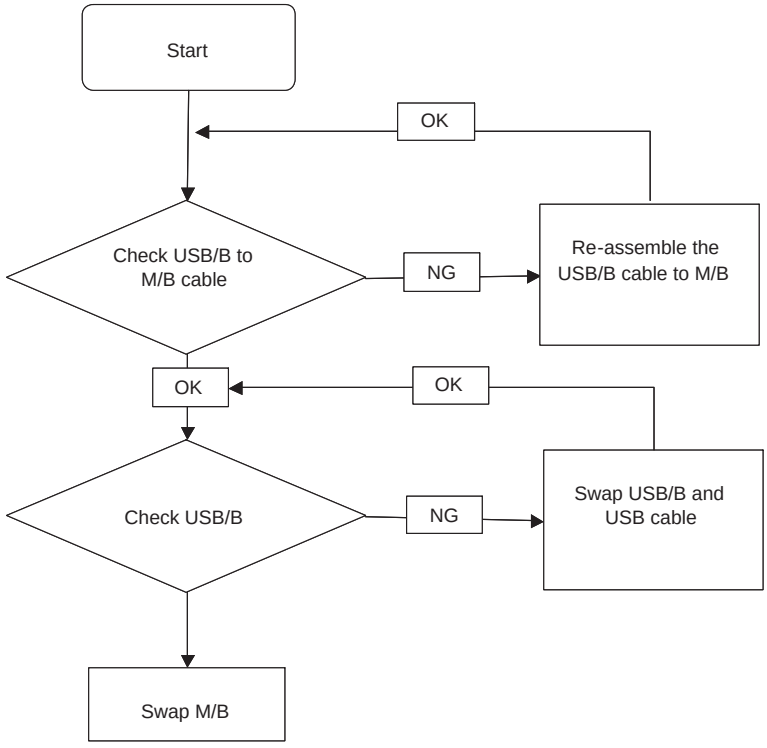
   g. Select **Startup Repair**.
   h. Startup Repair attempts to locate and resolve issues with the computer.
   i. When complete, click **Finish**.

   If an issue is discovered, follow the onscreen information to resolve the problem.
4. Run the Windows Memory Diagnostic Tool. For more information see Windows Help and Support.
5. Restart the computer and press F2 to enter the BIOS Utility. Check the BIOS settings are correct and that CD/DVD drive is set as the first boot device on the Boot menu.
6. Ensure all cables and jumpers on the HDD and ODD are set correctly.
7. Remove any recently added hardware and associated software.
8. Run the Windows Disk Defragmenter. For more information see Windows Help and Support.
9. Run Windows Check Disk by entering **chkdsk /r** from a command prompt. For more information see Windows Help and Support.
10. Restore system and file settings from a known good date using **System Restore**.

    If the issue is not fixed, repeat the preceding steps and select an earlier time and date.
11. Replace the HDD. See “Disassembly Process” on page 34.

# USB Failure (Right up/down side)

If the rightside **USB** port fails, perform the following actions one at a time to correct the problem. Do not replace non-defective FRUs:




# Other Failures

If the VGA board, LAN Port, external MIC or Speakers, PCI Express Card, 5-in-1 Card Reader or Volume Wheel fail, perform the following general steps to correct the problem. Do not replace non-defective FRUs:

1. Check whether the drive is OK.
2. Verify that the Test Fixture is ok.
3. Swap the main board and retest.

# Intermittent Problems

Intermittent system hang problems can be caused by a variety of reasons that have nothing to do with a hardware defect, such as: cosmic radiation, electrostatic discharge, or software errors. FRU replacement should be considered only when a recurring problem exists.

When analyzing an intermittent problem, do the following:

1. Run the advanced diagnostic test for the system board in loop mode at least 10 times.
2. If no error is detected, do not replace any FRU.
3. If any error is detected, replace the FRU. Rerun the test to verify that there are no more errors.

# Undetermined Problems

The diagnostic problems does not identify which adapter or device failed, which installed devices are incorrect, whether a short circuit is suspected, or whether the system is inoperative.

Follow these procedures to isolate the failing FRU (do not isolate non-defective FRU).

**NOTE:** Verify that all attached devices are supported by the computer.

**NOTE:** Verify that the power supply being used at the time of the failure is operating correctly. (See “Power On Issue” on page 144.):

1. Power-off the computer.
2. Visually check them for damage. If any problems are found, replace the FRU.
3. Remove or disconnect all of the following devices:
    - Non-Acer devices
    - Printer, mouse, and other external devices
    - Battery pack
    - Hard disk drive
    - DIMM
    - CD-ROM/Diskette drive Module
    - PC Cards
4. Power-on the computer.
5. Determine if the problem has changed.
6. If the problem does not recur, reconnect the removed devices one at a time until you find the failing FRU.
7. If the problem remains, replace the following FRU one at a time. Do not replace a non-defective FRU:
    - System board
    - LCD assembly

# Post Codes

These tables describe the Post Codes and components of the POST process.

**Sec:**

NO_EVICTION_MODE_DEBUG EQU 1 (CommonPlatform\sec\Ia32\SecCore.inc)

| | |
|---|---|
| **0x C2** | MTRR setup |
| **0x C3** | Enable cache |
| **0x C4** | Establish cache tags |
| **0x C5** | Enter NEM, Place the BSP in No Fill mode, set CR0.CD = 1, CR0.NW = 0. |
| **0xCF** | Cache Init Finished |

**Memory:**

DEBUG_BIOS EQU 1 (Chipset\Alviso\MemoryInitAsm\IA32\IMEMORY.INC)

| | |
|---|---|
| **0x A0** | First memory check point |
| **0x 01** | Enable MCHBAR |
| **0x 02** | Check for DRAM initialization interrupt and reset fail |
| **0x 03** | Verify all DIMMs are DDR or DDR2 and unbuffered |
| **0x 04** | Detect an improper warm reset and handle |
| **0x 05** | Detect if ECC SO-DIMMs are present in the system |
| **0x 06** | Verify all DIMMs are single or double sided and not asymmetric |
| **0x 07** | Verify all DIMMs are x8 or x16 width |
| **0x 08** | Find a common CAS latency between the DIMMS and the MCH |
| **0x 09** | Determine the memory frequency and CAS latency to program |
| **0x 10** | Determine the smallest common TRAS for all DIMMs |
| **0x 11** | Determine the smallest common TRP for all DIMMs |
| **0x 12** | Determine the smallest common TRCD for all DIMMs |
| **0x 13** | Determine the smallest refresh period for all DIMMs |

| | |
|---|---|
| **0x 14** | Verify burst length of 8 is supported by all DIMMs |
| **0x 15** | Determine the smallest tWR supported by all DIMMs |
| **0x 16** | Determine DIMM size parameters |
| **0x 17** | Program the correct system memory frequency |
| **0x 18** | Determine and set the mode of operation for the memory channels |
| **0x 19** | Program clock crossing registers |
| **0x 20** | Disable Fast Dispatch |
| **0x 21** | Program the DRAM Row Attributes and DRAM Row Boundary registers |
| **0x 22** | Program the DRAM Bank Architecture register |
| **0x 23** | Program the DRAM Timing & and DRAM Control registers |
| **0x 24** | Program ODT |
| **0x 25** | Perform steps required before memory init |
| **0x 26** | Program the receive enable reference timing control register<br>Program the DLL Timing Control Registers, RCOMP settings |
| **0x 27** | Enable DRAM Channel I/O Buffers |
| **0x 28** | Enable all clocks on populated rows |
| **0x 29** | Perform JEDEC memory initialization for all memory rows |
| **0x 30**<br>**0x 31** | Perform steps required after memory init<br>Program DRAM throttling and throttling event registers |
| **0x 32** | Setup DRAM control register for normal operation and enable |
| **0x 33** | Enable RCOMP |
| **0x 34** | Clear DRAM initialization bit in the SB |
| **0x 35** | Initialization Sequence Completed, program graphic clocks |
| **0x AF** | Disable access to the XMM registers |

**BDS & Specific action:**

| | |
|---|---|
| **0x0<br>0** | Report the legacy boot is happening |
| **0x1<br>2** | Wake up the APs |
| **0x1<br>3** | Initialize SMM Private Data and relocate BSP SMBASE |
| **0x2<br>1<br>0x2<br>7** | PC init begin at the stage1<br>Report every memory range do the hard ware ECC init |
| **0x2<br>8** | Report status code of every memory range |
| **0x5<br>0** | Get the root bridge handle |
| **0x5<br>1** | Notify pci bus driver starts to program the resource |
| **0x5<br>8** | Reset the host controller |
| **0x5A** | IdeBus begin initialization |
| **0x7<br>0** | Simple Text Output Protocol Functions(VGA class reset) |
| **0x7<br>1** | Report that VGA Class driver is being disabled |
| **0x7<br>2** | Report that VGA Class driver is being enabled |
| **0x7<br>8** | Terminal Console In reset and Console Out reset |
| **0x7<br>9** | Report that the remote terminal is being disabled |
| **0x7A** | Report that the remote terminal is being enabled |
| **0x9<br>0** | Keyboard reset |
| **0x9<br>1** | USB Keyboard disable |
| **0x9<br>2** | Keyboard detection |
| **0x9<br>3** | Report that the usb keyboard is being enabled |
| **0x9<br>4** | Clear the keyboard buffer |
| **0x9<br>5** | Init Keyboard |
| **0x9<br>8** | Mouse reset |

| | |
|---|---|
| **0x9<br>9<br>0x9A** | Mouse disable<br>Detect PS2 mouse |
| **0x9B** | Report that the mouse is being enabled |
| **0xB8** | Peripheral removable media reset(ex:IsaFloppy, USB device) |
| **0xB9** | Peripheral removable media disable |
| **0xBB** | Peripheral removable media enable |
| **0xE<br>4** | Report Status Code here for DXE_ENTRY_POINT once it is available |
| **0xF<br>8** | Report that ExitBootServices() has been called |
| **0xF<br>9** | Runtime driver set virtual address map |

**Each PEIM entry point used in 80_PORT**

| | |
|---|---|
| **0x<br>00** | |
| **0x<br>01** | PEI_EVENT_LOG |
| **0x<br>02** | PEI_OEM_SERVICE |
| **0x<br>03** | PEI_SIO_INIT |
| **0x<br>04** | PEI_MONO_STATUS_CODE |
| **0x<br>05** | PEI_CPU_IO_PCI_CFG |
| **0x<br>06** | PEI_CPU_IO |
| **0x<br>07** | PEI_PCI_CFG |
| **0x<br>08** | PEI_CPU_PEIM |
| **0x<br>09** | PEI_PLATFORM_STAGE1 |
| **0x0A** | PEI_VARIABLE |
| **0x0B<br>0x0C** | PEI_SB_INIT<br>PEI_CAPSULE |
| **0x0D** | PEI_PLATFORM_STAGE2 |
| **0x0<br>E** | PEI_SB_SMBUS_ARP_DISABLED |
| **0x<br>0F** | PEI_HOST_TO_SYSTEM |
| **0x<br>10** | PEI_MEMORY_INIT |

| | |
|---|---|
| **0x 11** | PEI_S3_RESUME |
| **0x 12** | PEI_CLOCK_GEN |
| **0x 13** | PEI_OP_PRESENCE |
| **0x 14** | PEI_TPM_TCG |
| **0x 15** | PEI_FIND_FV |
| **0x 16** | PEI_H2O_DEBUG_IO |
| **0x 17** | PEI_H2O_DEBUG_COMM |
| **0x 18** | PEI_SMM_CONTROL |
| **0x19~0x1F** | PEI_RESERVED |
| **0x20~0x2E** | PEI_OEM_DEFINED |
| **0x2F** | PEI_DXE_IPL |

**Each Driver entry point used in 80_PORT**

| | |
|---|---|
| **0x 30** | RESERVED |
| **0x 31** | DXE_CRC32_SECTION_EXTRACT |
| **0x 32** | SCRIPT_SAVE |
| **0x 33** | ACPI_S3_SAVE |
| **0x 34** | SMART_TIMER |
| **0x 35** | JPEG_DECODER |
| **0x 36** | PCX_DECODER |
| **0x 37** | HT_CPU / MP_CPU |
| **0x 38** | LEGACY_METRONOME |
| **0x 39** | FTWLITE |
| **0x3A** | RUN_RIME |
| **0x3B** | MONOTONIC_COUNTER |
| **0x3C** | WATCH_DOG_TIMER |

| | |
|---|---|
| **0x3D** | SECURITY_STUB |
| **0x3E** | DXE_CPU_IO |
| **0x3F** | CF9_RESET |
| **0x40** | PC_RTC |
| **0x41** | STATUS_CODE |
| **0x42** | VARIABLE |
| **0x43** | EMU_VARIABLE |
| **0x44** | DXE_CHIPSET_INIT |
| **0x45** | DXE_ALERT_FORMAT |
| **0x46** | PCI_HOST_BRIDGE |
| **0x47** | PCI_EXPRESS |
| **0x48** | DXE_SB_INIT |
| **0x49** | IDE_CONTROLLER |
| **0x4A**<br>**0x4B** | SATA_CONTROLLER<br>SB_SM_BUS |
| **0x4C** | ISA_ACPI_DRIVER |
| **0x4D** | ISA_BUS |
| **0x4E** | ISA_SERIAL |
| **0x4F** | IDE_BUS |
| **0x50** | PCI_BUS |
| **0x51** | BOOT_PRIORITY |
| **0x52** | FVB_SERVICE |
| **0x53** | ACPI_PLATFORM |
| **0x54** | PCI_HOT_PLUG |
| **0x55** | DXE_PLATFORM |

| | |
|---|---|
| **0x 56** | PLATFORM_IDE |
| **0x 57** | SMBIOS |
| **0x 58** | MEMORY_SUB_CLASS |
| **0x 59** | MISC_SUB_CLASS |
| **0x5A** | CON_PLATFORM |
| **0x5B** | SAVE_MEMORY_CONFIG |
| **0x5C** | ACPI_SUPPORT |
| **0x5D** | CON_SPLITTER_UGA_VGA / CON_SPLITTER |
| **0x5 E** | VGA_CLASS |
| **0x 5F** | DATA_HUB |
| **0x 60** | DISK_IO |
| **0x 61 0x 62** | MEMORY_TEST<br>CRISIS_RECOVERY |
| **0x 63** | LEGACY_8259 |
| **0x 64** | LEGACY_REGION |
| **0x 65** | LEGACY_INTERRUPT |
| **0x 66** | BIOS_KEYBOARD |
| **0x 67** | BIOS_VEDIO |
| **0x 68** | MONITER_KEY |
| **0x 69** | LEGACY_BIOS |
| **0x6A** | LEGACY_BIOS_PLATFORM |
| **0x6B** | PCI_PLATFORM |
| **0x6C** | ISA_FLOOPY |
| **0x6D** | PS2_MOUSE |
| **0x6 E** | USB_BOT |
| **0x 6F** | USB_CBI0 |

| | |
|---|---|
| **0x 70** | USB_CBI1 |
| **0x 71** | USB_KB |
| **0x 72** | USB_MASS_STORAGE |
| **0x 73** | BUS_PCI_UHCI |
| **0x 74** | USB_MOUSE |
| **0x 75** | USB_BUS |
| **0x 76** | SETUP_UTILITY |
| **0x 77** | FW_BLOCK_SERVICE |
| **0x 78** | USB_LEGACY_PLATFORM |
| **0x 79** | GRAPHICS_CONSOLE |
| **0x7A** | TERMINAL |
| **0x7B** | DATA_HUB_STD_ERR |
| **0x7C** | FAT |
| **0x7D** | PARTITION |
| **0x7 E** | ENGLISH |
| **0x 7F** | FRENCH |
| **0x 80** | HII_DATABASE |
| **0x 81** | SETUP_BROWSER |
| **0x 82** | OEM_SETUP_BROWSER |
| **0x 83** | OEM_BADGING_SUPPORT |
| **0x 84** | LEGACY_MOUSE |
| **0x 85** | BIOS_SNP16 |
| **0x 86** | BUS_PCI_UNDI |
| **0x 87** | SETUP_MOUSE |
| **0x 88** | OEM_SETTING |

| | |
|---|---|
| **0x89** | MONITOR_KEY |
| **0x8A** | PLATFORM_BDS |
| **0x8B** | FAULT_TOLERANT_WRITE |
| **0x8C** | UPDATE_DISPATCHER |
| **0x8D** | CHINESE |
| **0x8E** | TPM_S3_Resume |
| **0x8F**<br>**0x90** | USB_EHCI<br>SNP_32_64 |
| **0x91** | PXE_BC |
| **0x92** | PXE_DHCP4 |
| **0x93** | EBC |
| **0x94~0x9F** | RESERVED |
| **0xA0** | DXE_H2O_DEBUG_IO |
| **0xA1** | DXE_H2O_DEBUG_IO |
| **0xA2** | DXE_TPM_TCG |
| **0xA3** | DXE_TPM_PHYSICAL_PRESENCE |
| **0xA4** | DXE_OEM_SERVICE |
| **0xA5** | DXE_EVENT_LOG |
| **0xA6**<br>**0xA7** | DXE_ SECURITY_HDD_PASSWORD_SERVICE<br>DXE_LAN_ASF_INIT |
| **0xA8** | DXE_BUS_PCI_SERIAL |
| **0xA9** | DXE_LAN_IDER_CONTROLLER |
| **0xAA** | DXE_LAN_AMT |
| **0xAB** | DXE_ SECURITY_SYSTEM_PASSWORD_SERVICE |
| **0xAC** | DXE_ SECURITY_ PASSWORD_CONSOLE |
| **0xAD** | DXE_ DATA_HUB_RECORD_POLICY |
| **0xAE** | DXE_TPM_DRIVER |
| **0xAF** | RESERVED |
| **0xB0**<br>**0xB1** | JAPANESE<br>DXE_UNICODE_COLLACTION |

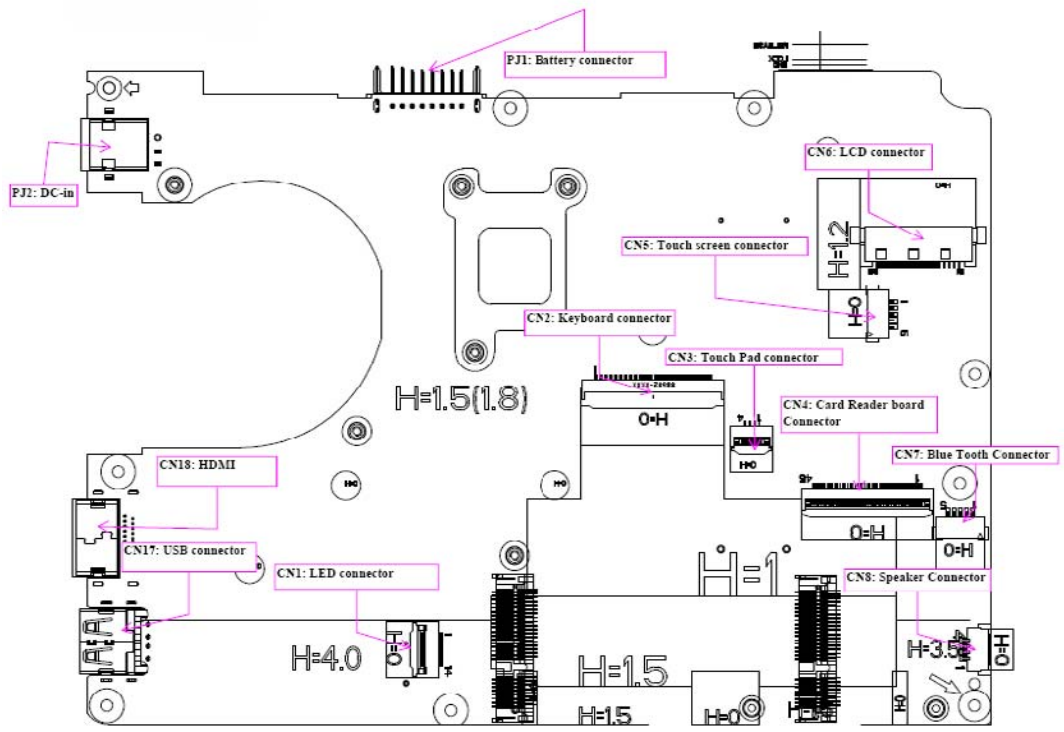
**Each SmmDriver entry point used in 80_PORT**

| | |
|---|---|
| **0xC0** | SMM_ACCESS |

| | |
|---|---|
| **0xC1** | SMM_CONTROL |
| **0xC2** | SMM_BASE |
| **0xC3** | SMMAP |
| **0xC4** | SMMCORE |
| **0xC5** | SMM_DISPATCH |
| **0xC6** | SMM_START |
| **0xC7** | SMM_RUNTIME |
| **0xC8** | SB_SMM_DISPATCH |
| **0xC9** | SMM_THUNK |
| **0xCA** | SMM_ACPI_SW_CHILD |
| **0xCB** | SMM_SB_S3_SAVE |
| **0xCC** | SMM_PLATFORM |
| **0xCD**<br>**0xCE** | SMM_GMCH_MBI<br>SMM_FW_BLOCK_SERVICE |
| **0xCF** | SMM_VARIABLE |
| **0xD0** | SMM_IHISI |
| **0xD1** | SMM_INT15_MICROCODE |
| **0xD2** | SMM_PNP |
| **0xD3** | SMM_USB_LEGACY |
| **0xD4** | SMM_INT13_HDD |
| **0xD5** | SMM_INIT_PPM |
| **0xD6** | SMM_OHCI1394 |
| **0xD7** | SMM_ SECURITY_HDD_PASSWORD_SERVICE |
| **0xD8** | SMM_OEM_SERVICE |
| **0xD9** | SMM_PPM |
| **0xDA** | SMM_DIGITAL_THERMAL_SENSOR |

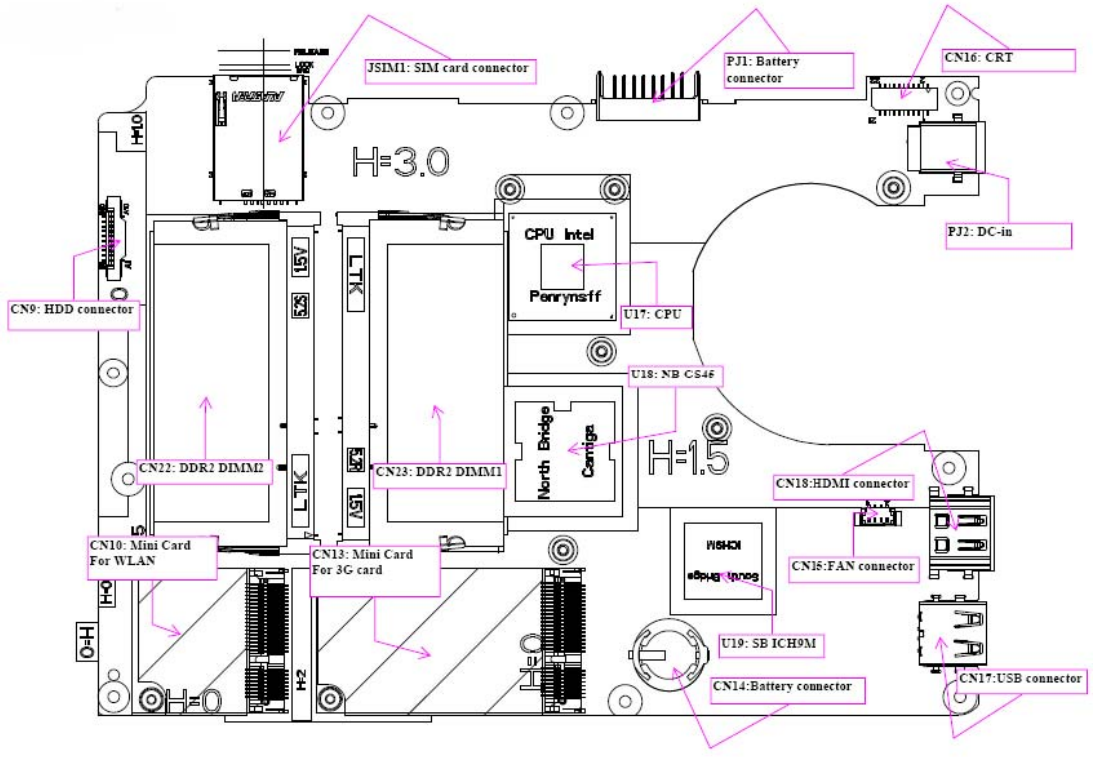
# Jumper and Connector Locations

## Mainboard Top View




| Item | Description | Item | Description |
|---|---|---|---|
| PJ2 | DC-in | CN1 | LED connector |
| PJ1 | Battery connector | CN17 | USB connector |
| CN6 | LCD connector | CN18 | HDMI |
| CN5 | Touchscreen connector | CN2 | Keyboard connector |
| CN7 | Bluetooth connector | CN3 | Touchpad connector |
| CN8 | Speaker connector | CN4 | Card reader board connector |

# Mainboard Bottom View




| Item | Description | Item | Description |
|---|---|---|---|
| CN9 | HDD connector | CN17 | USB connector |
| JSIM1 | SIM card connector | CN14 | RTC battery connector |
| PJ1 | Battery connector | CN13 | Mini card for 3G |
| CN16 | CRT | CN10 | Mini card for WLAN |
| PJ2 | DC-in | CN22 | DRR2 DIMM2 |
| U17 | CPU | CN23 | DDR2 DIMM1 |
| U18 | North Bridge GS45 | U19 | SB ICH9M |
| CN18 | HDMI connector | CN15 | Fan connector |

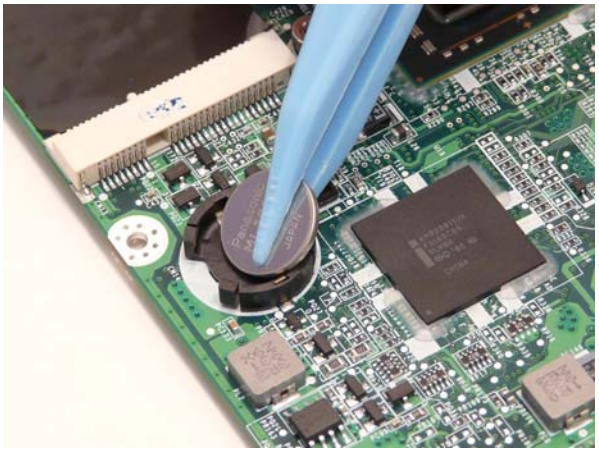
# Clearing Password Check and BIOS Recovery

This section provides a procedure for clearing the password and BIOS. The Hardware Open Gap on the main board clears the CMOS of all user settings and restores factory defaults.

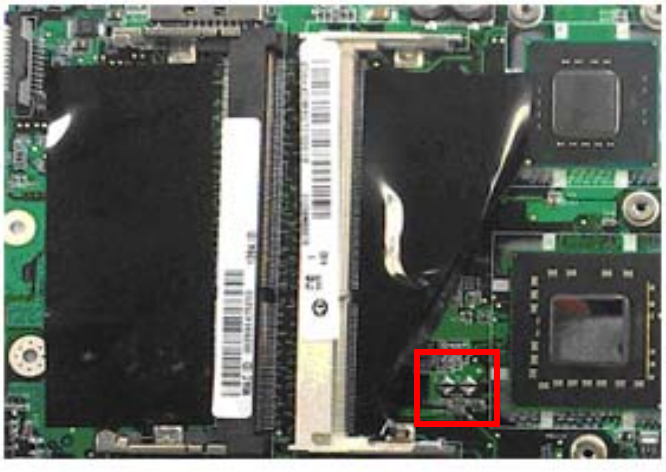
## Mainboard CMOS Discharge

Discharging the CMOS clears all user settings.

1. Disassemble the notebook and take out the Mainboard. See “Removing the Mainboard” on page 69.
2. Remove the RTC battery. See “Removing the RTC Battery” on page 73.



3. Turn the mainboard over, lift up the DIMM protective cover, and short the G3 pad.



4. Reconnect the RTC battery and reassemble the unit.

# BIOS Recovery by Crisis Disk

## BIOS Recovery Boot Block

The BIOS Recovery Boot Block is a special block of BIOS. It is used to boot up the system with minimum BIOS initialization. Users can enable this feature to restore the BIOS firmware to the factory settings if a BIOS flash process fails.

## BIOS Recovery Hotkey

The system provides a function hotkey: **Fn+Esc**, to enable the BIOS Recovery process when a system is powered on during BIOS POST. To use this function, it is strongly recommended to have the AC adapter and Battery present. If this function is enabled, the system will force the BIOS to enter a special BIOS block, called Boot Block.

## Steps for BIOS Recovery from USB Storage

Before performing this procedure, prepare a Crisis USB key. The Crisis USB key can be made by executing the Crisis Disk program in a functioning system with a Windows XP, Vista or 7 OS.

**IMPORTANT:**The Crisis Disk program will overwrite all data on any drive that you use as a crisis disk.

Follow the steps below:

1. Modify the archive name from **ZE8 bios** to **ZE8X64.fd**
2. Save ROM file (file name: **ZE8X64.fd**) to the root directory of the USB storage.
3. Plug the USB storage into a USB port of the machine to have the crisis utility run on.
4. Remove the battery and AC adaptor of the machine.
5. While pressing the **Fn + ESC** buttons plug in the AC adaptor and then press Power. Keep pressing **Fn+ESC** till the power button flashes.
   The LED of the USB flash disk flashes for three (3) to seven (7) minutes.
   When CRISIS is complete, the system auto restarts with a workable BIOS.
6. Update the latest version BIOS for this machine by the regular BIOS flashing process.

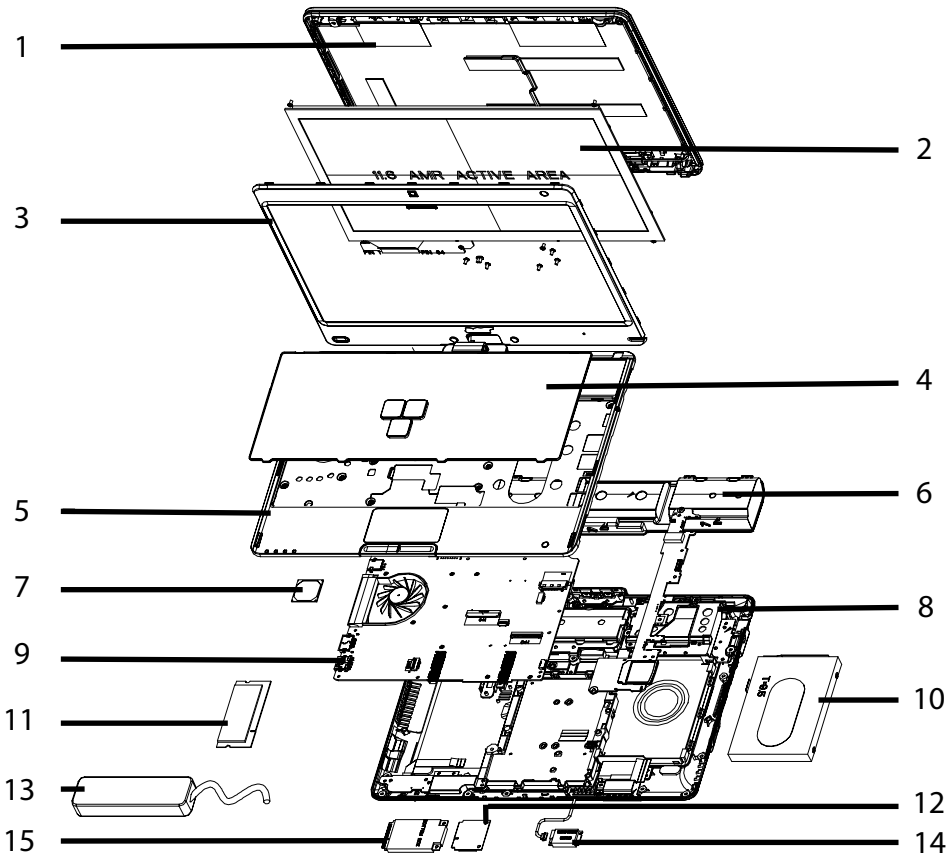
# FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of the computer. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted on the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

**NOTE:** To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional Acer office on how to return it.

## Exploded Diagram




| Item | Description | Acer Part No. |
|---|---|---|
| 1 | LCD cover | 60.PNF07.001 |
| 2 | LCD Panel | LK.11605.003 |
| 3 | LCD Bezel | 60.PND07.004 |
| 4 | Keyboard Module | KB.I110A.026 |
| 5 | Upper Cover | 60.PLN07.001 |

| Item | Description | Acer Part No. |
|---|---|---|
| 6 | Battery Module | BT.00607.114 |
| 7 | CPU | N/A |
| 8 | Chassis Assembly | 60.PLN07.003 |
| 9 | Mainboard Assembly | MB.PND06.002 |
| 10 | Hard Disk Drive Assembly | KH.16001.042 |
| 11 | RAM DDR3 Module | KN.1GB0B.019 |
| 12 | WLAN Module | KI.SPH01.005 |
| 13 | Adapter | AP.03001.001 |
| 14 | Bluetooth Module | BH.21100.004 |
| 15 | 3G Module | TBD |

# Fru List

| CATEGORY | PARTNAME | ACER PART NO. |
|---|---|---|
| **ADAPTER** | | |
| | ADAPTER DELTA 30W 19V 1.7X5.5X11 BLACK ADP-30JH BA LF | AP.03001.001 |
| | ADAPTER LITE-ON 30W 1.7X5.5X11 BLACK PA-1300-04AC LF | AP.03003.001 |
| | ADAPTER HIPRO 30W 19V 1.7X5.5X11 BLACK HP-A0301R3 B1LF LF | AP.0300A.001 |
| **BATTERY** | | |
| | Battery SIMPLO UM-2009F Li-Ion 3S2P SAMSUNG 6 cell 5600mAh Main COMMON ID:UM09F70 | BT.00607.114 |
| | Battery SANYO UM-2009F Li-Ion 3S2P SANYO 6 cell 5600mAh Main COMMON | BT.00603.105 |
| **BOARD** | | |
| | Foxconn Bluetooth FOX BRM 2046 BT2.1 | BH.21100.004 |
| | Lan Intel WLAN 112BN.HMWG MM#903341 | KI.CPH01.001 |
| | Lan Intel WLAN 512AG_HMWG Shirley Peak 5100 MM#897072 | KI.SPH01.005 |
| | Lan Intel WLAN 512AN_HMWG Shirley Peak 5100 MM#895373 | KI.SPH01.003 |
| | Foxconn Wireless LAN Atheros HB93 1x2 BGN (HM) | NI.23600.046 |
| | CRT BOARD | 55.PL907.001 |
| | LED BOARD | 55.PL907.002 |
| | CARD READER BOARD | 55.PL907.003 |
| | TP BOARD | 55.PL907.004 |

| CATEGORY | PARTNAME | ACER PART NO. |
|---|---|---|
| | TOUCH PANEL CONTROL BOARD | 55.PND07.001 |
| **CABLE** | | |
| | POWER CORD US 3PIN ROHS | 27.TAXV7.001 |
| | POWER CORD UK 3PIN | 27.A03V7.004 |
| | BLUETOOTH CABLE | 50.PL907.001 |
| | FFC CABLE - LED/B TO MB | 50.PL907.002 |
| | CRT CABLE | 50.PL907.003 |
| | FFC CABLE - CARD READER/B TO MB | 50.PL907.004 |
| | HDD FPC CABLE | 50.PL907.005 |
| | LCD CABLE 11.6 IN. | 50.PND07.001 |

| CATEGORY | PARTNAME | ACER PART NO. |
|---|---|---|
| **CASE/COVER/BRACKET ASSEMBLY** | | |
| | UPPER CASE ASSY 3G BLACK FOR BT | 60.PLN07.001 |
| | UPPER CASE ASSY 3G RED FOR BT | 60.PN707.001 |
| | UPPER CASE ASSY 3G BLUE FOR BT | 60.PN607.001 |
| | UPPER CASE ASSY 3G BLACK FOR NON BT | 60.PLN07.002 |
| | UPPER CASE ASSY 3G RED FOR NON BT | 60.PN707.002 |
| | UPPER CASE ASSY 3G BLUE FOR NON BT | 60.PN607.002 |
| | UPPER CASE ASSY WIFI BLACK FOR BT | 60.PL907.001 |
| | UPPER CASE ASSY WIFI RED FOR BT | 60.PND07.001 |
| | UPPER CASE ASSY WIFI BLUE FOR BT | 60.PNC07.001 |
| | UPPER CASE ASSY WIFI BLACK FOR NON BT | 60.PL907.002 |
| | UPPER CASE ASSY WIFI RED FOR NON BT | 60.PND07.002 |
| | UPPER CASE ASSY WIFI BLUE FOR NON BT | 60.PNC07.002 |
| | LOWER CASE ASSY FOR 3G | 60.PLN07.003 |
| | LOWER CASE ASSY FOR WIFI | 60.PND07.003 |
| | HDD COVER | 42.PND07.001 |
| | SD DUMMY CARD BK | 42.BCC07.004 |
| | HINGE CAP | 42.PND07.002 |
| | TOP CAP BLACK | 42.PND07.003 |
| | LCD BRACKET - R | 33.PND07.001 |

| CATEGORY | PARTNAME | ACER PART NO. |
|---|---|---|
| | LCD BRACKET - L | 33.PND07.002 |
| | CENTER HINGE | 33.PND07.003 |
| | LCD COVER ASSY BLACK W/3G ANTENNA | 60.PNF07.001 |
| | LCD COVER ASSY RED W/3G ANTENNA | 60.PN707.003 |
| | LCD COVER ASSY BLUE W/3G ANTENNA | 60.PN607.003 |
| | LCD COVER ASSY BLACK W/WIFI ANTENNA | 60.PL907.003 |
| | LCD COVER ASSY RED W/WIFI ANTENNA | 60.PND07.005 |
| | LCD COVER ASSY BLUE W/WIFI ANTENNA | 60.PNC07.003 |
| | LCD MODULE ASSY NLED11.6WXGAG BLACK W/3G ANTENNA | 6M.PNF07.001 |
| | LCD MODULE ASSY NLED11.6WXGAG RED W/3G ANTENNA | 6M.PN707.001 |
| | LCD MODULE ASSY NLED11.6WXGAG BLUE W/3G ANTENNA | 6M.PN607.001 |
| | LCD MODULE ASSY NLED11.6WXGAG BLACK W/WIFI ANTENNA | 6M.PL907.001 |
| | LCD MODULE ASSY NLED11.6WXGAG RED W/WIFI ANTENNA | 6M.PND07.001 |
| | LCD MODULE ASSY NLED11.6WXGAG BLUE W/WIFI ANTENNA | 6M.PNC07.001 |
| | LCD BEZEL ASSY BLUE | 60.PND07.004 |
| | LCD BEZEL ASSY BLACK | 60.PND07.004 |
| | LCD BEZEL ASSY BLACK FOR MICROSOFT | 60.PNF07.002 |
| **CCD** | | |
| | CAMERA MODULE | 57.PND07.001 |

| CATEGORY | PARTNAME | ACER PART NO. |
|---|---|---|
| **HDD/HARD DISK DRIVE** | | |
| | HDD TOSHIBA 2.5" 5400rpm 160GB MK1655GSX Libra SATA LF F/W: FG011J | KH.16004.006 |
| | HDD HGST 2.5" 5400rpm 160GB HTS545016B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.16007.026 |
| | HDD WD 2.5" 5400rpm 160GB WD1600BEVT-22ZCTO ML160 SATA LF F/W:11.01A11 | KH.16008.022 |
| | HDD SEAGATE 2.5" 5400rpm 250GB ST9250315AS Wyatt SATA LF F/W:0001SDM1 | KH.25001.016 |
| | HDD HGST 2.5" 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.25007.016 |
| | HDD WD 2.5" 5400rpm 250GB WD2500BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11 | KH.25008.021 |
| | HDD SEAGATE 2.5" 5400rpm 320GB ST9320325AS Wyatt SATA LF F/W:0001SDM1 | KH.32001.017 |
| | HDD HGST 2.5" 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.32007.008 |
| | HDD WD 2.5" 5400rpm 320GB WD3200BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11 | KH.32008.013 |
| | HDD SEAGATE 2.5" 5400rpm 500GB ST9500325AS Wyatt SATA LF F/W:0001SDM1 | KH.50001.011 |
| | HDD TOSHIBA 2.5" 5400rpm 500GB MK5055GSX Libra SATA LF F/W:FG001J | KH.50004.001 |
| | HDD HGST 2.5" 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.50007.010 |
| | HDD WD 2.5" 5400rpm 500GB WD5000BEVT-22ZAT0 ML250 SATA LF F/W:01.01A01 | KH.50008.013 |
| | HDD SEAGATE 2.5" 5400rpm 160GB ST9160314AS Wyatt SATA LF F/W:0001SDM1 | KH.16001.042 |
| | HDD TOSHIBA 2.5" 5400rpm 250GB MK2555GSX Libra SATA LF F/W:FG001J | KH.25004.003 |
| **HEATSINK** | | |
| | THERMAL MODULE | 60.PL907.004 |

| CATEGORY | PARTNAME | ACER PART NO. |
|---|---|---|
| **KEYBOARD** | | |
| | Keyboard ACER NT1T JM11 86KS Black Arabic Texture | KB.I110A.002 |
| | Keyboard ACER NT1T JM11 87KS Black FR/Arabic Texture | KB.I110A.008 |
| | Keyboard ACER NT1T JM11 87KS Black Brazilian Portuguese Texture | KB.I110A.004 |
| | Keyboard ACER NT1T JM11 87KS Black Belgium Texture | KB.I110A.003 |
| | Keyboard ACER NT1T JM11 87KS Black CZ/SK Texture | KB.I110A.005 |
| | Keyboard ACER NT1T JM11 86KS Black Chinese Texture | KB.I110A.006 |
| | Keyboard ACER NT1T JM11 87KS Black Danish Texture | KB.I110A.007 |
| | Keyboard ACER NT1T JM11 87KS Black French Texture | KB.I110A.009 |
| | Keyboard ACER NT1T JM11 87KS Black German Texture | KB.I110A.010 |
| | Keyboard ACER NT1T JM11 86KS Black Greek Texture | KB.I110A.011 |
| | Keyboard ACER NT1T JM11 87KS Black Hungarian Texture | KB.I110A.012 |
| | Keyboard ACER NT1T JM11 87KS Black Italian Texture | KB.I110A.013 |
| | Keyboard ACER NT1T JM11 91KS Black Japanese Texture | KB.I110A.014 |
| | Keyboard ACER NT1T JM11 87KS Black Nordic Texture | KB.I110A.015 |
| | Keyboard ACER NT1T JM11 87KS Black Norwegian Texture | KB.I110A.016 |
| | Keyboard ACER NT1T JM11 87KS Black Portuguese Texture | KB.I110A.017 |
| | Keyboard ACER NT1T JM11 86KS Black Russian Texture | KB.I110A.018 |
| | Keyboard ACER NT1T JM11 87KS Black SLO/CRO Texture | KB.I110A.019 |
| | Keyboard ACER NT1T JM11 87KS Black Spanish Texture | KB.I110A.020 |
| | Keyboard ACER NT1T JM11 87KS Black Sweden Texture | KB.I110A.021 |
| | Keyboard ACER NT1T JM11 87KS Black Swiss/G Texture | KB.I110A.022 |
| | Keyboard ACER NT1T JM11 86KS Black Thailand Texture | KB.I110A.023 |
| | Keyboard ACER NT1T JM11 87KS Black Turkish Texture | KB.I110A.024 |
| | Keyboard ACER NT1T JM11 87KS Black UK Texture | KB.I110A.025 |
| | Keyboard ACER NT1T JM11 86KS Black US International Texture | KB.I110A.026 |
| | Keyboard ACER NT1T JM11 86KS Black US International w/ Hebrew Texture | KB.I110A.027 |
| | Keyboard ACER NT1T JM11 87KS Black US w/ Canadian French Texture | KB.I110A.028 |

| CATEGORY | PARTNAME | ACER PART NO. |
|---|---|---|
| **LCD** | | |
| | LED LCD SAMSUNG 11.6" WXGAG LTN116AT01-A01 W/ TOUCH PANEL | 56.PND07.001 |
| | LED LCD AUO 11.6" WXGAG B116XW02 V0 1A (3G) W/ TOUCH PANEL | 56.PND07.002 |
| | LED LCD LPL 11.6" WXGAG LP116WH1-TLA1 W/TOUCH PANEL | 56.PND07.003 |
| | LED LCD CMO 11.6" WXGAG N116B6-L02 C2 W/TOUCH PANEL | 56.PND07.004 |
| **MAINBOARD** | | |
| | Mainboard JM12_MS Intel G45 LF SU2300 W/3G W/O RAM | MB.PND06.002 |
| | Mainboard JM12_MS Intel G45 LF SU2300 WO/3G W/O RAM | MB.PND06.001 |
| | | TBD |
| **MEMORY** | | |
| | Memory NANYA SO-DIMM DDRIII 1066 1GB NT1GC64BH8A1PS-BE LF 64*16 0.07um | KN.1GB03.031 |
| | Memory SAMSUNG SO-DIMM DDRIII 1066 1GB M471B2874DZ1-CF8 LF | KN.1GB0B.019 |
| | Memory SAMSUNG SO-DIMM DDRIII 1066 1GB M471B2873EH1-CF8 LF 64*16 0.055um | KN.1GB0B.028 |
| | Memory ELPIDA SO-DIMM DDRIII 1066 1GB EBJ10UE8BDS0-AE-F LF 128*8 0.065um | KN.1GB09.012 |
| | Memory NANYA SO-DIMM DDRIII 1066 2GB NT2GC64B8HA1NS-BE LF 128*8 0.07um | KN.2GB03.012 |
| | Memory SAMSUNG SO-DIMM DDRIII 1066 2GB M471B5673DZ1-CF8 LF | KN.2GB0B.005 |
| | Memory SAMSUNG SO-DIMM DDRIII 1066 2GB M471B5673EH1-CF8 LF 128*8 0.055um | KN.2GB0B.012 |
| | Memory HYNIX SO-DIMM DDRIII 1066 2GB HMT125S6BFR8C-G7 N0 LF 128*8 0.055um | KN.2GB0G.014 |
| | Memory MICRON SO-DIMM DDRIII 1066 2GB MT16JSF25664HZ-1G1F1 LF 128*8 0.065um | KN.2GB04.015 |
| | Memory ELPIDA SO-DIMM DDRIII 1066 2GB EBJ21UE8BDS0-AE-F LF 128*8 0.065um | KN.2GB09.006 |
| | Memory SAMSUNG SO-DIMM DDRIII 1066 4GB M471B5273BH1-CF8 LF 256*8 0.055um | KN.4GB0B.007 |
| **MICROPHONE** | | |
| | MIC | 23.PND07.001 |
| **MISCELLANEOUS** | | |
| | BASE ERAR RUBBER | 47.PL907.001 |
| | BASE ERAR RUBBER -2 | 47.PL907.002 |
| | LOWER CASE RUBBER FEET - B | 47.PL907.003 |
| | LOWER CASE RUBBER FEET - F | 47.PL907.004 |

| CATEGORY | PARTNAME | ACER PART NO. |
|---|---|---|
| | SCREW RUBBER IN HINGE | 47.PL907.005 |
| **SPEAKER** | | |
| | SPEAKER SET | 23.PL907.001 |
| **STYLUS** | | |
| | STYLUS | 60.PL907.005 |

**Screwlist**

| CATEGORY | PART NAME | ACER PART NO. |
|---|---|---|
| SCREW | SCREW M2.0*3.0-I(BKAG)(NYLOK IRON | 86.ARE07.002 |
| SCREW | SCREW 2.0*4.0 | 86.W0107.003 |
| SCREW | SCREW M2.0*2.5-I(BUWZN) | 86.TPK07.001 |
| SCREW | SCREW M2*5-I(BZN)(NYLOK) | 86.TG607.004 |
| SCREW | SCREW M2.0*4-I(BZN)(NYLOK)IRON | 86.S6507.003 |

# Model Definition and Configuration

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| TWN | GCTWN | LX.PND02.003 | AS1420P-232G25n W7HP64ATTW1 MC UMACbb 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_TC11 | CMSU2300B |
| AAP | Australia/ New Zealand | LX.PND02.002 | AS1420P-232G25n W7HP64ATAU1 MC UMACbb 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | CMSU2300B |
| WW | WW | S2.PND02.001 | AS1420P-232G16n W7HP64AWW1 MC UMACbb 2*1G/160/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES62 | CMSU2300B |
| EMEA | France | LX.PND02.001 | AS1420P-233G25n W7HP64ATFR1 MC UMACbb 2G+1G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_FR21 | CMSU2300B |
| EMEA | Middle East | LX.PL902.032 | AS1420P-232G25n EM W7HP64EMATME4 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | CMSU2300B |
| EMEA | Middle East | LX.PL902.033 | AS1420P-232G25n EM W7HP64EMATME2 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_AR11 | CMSU2300B |
| EMEA | Middle East | LX.PL902.038 | AS1420P-232G25n EM W7HP64EMATME2 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | CMSU2300B |
| EMEA | Middle East | LX.PL902.029 | AS1420P-232G25n EM W7HP64EMATME3 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES81 | CMSU2300B |
| EMEA | Middle East | LX.PL902.035 | AS1420P-232G25n EM W7HP64EMATME6 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | CMSU2300B |
| EMEA | Middle East | LX.PL902.034 | AS1420P-232G25n EM W7HP64EMATME2 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_AR21 | CMSU2300B |
| EMEA | Middle East | LX.PL902.040 | AS1420P-232G25n EM W7HP64EMATME9 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES81 | CMSU2300B |
| EMEA | Turkey | LX.PL902.027 | AS1420P-232G25n EM W7HP64EMATTR1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_TR31 | CMSU2300B |
| EMEA | South Africa | LX.PL902.037 | AS1420P-232G25n EM W7HP64EMATZA4 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | CMSU2300B |
| EMEA | South Africa | LX.PL902.039 | AS1420P-232G25n EM W7HP64EMATZA1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES81 | CMSU2300B |
| EMEA | South Africa | LX.PL902.036 | AS1420P-232G25n EM W7HP64EMATZA2 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | CMSU2300B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| EMEA | Spain | LX.PL902.045 | AS1420P-232G25n W7HP64ATES1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AUk_ES51 | CMSU2300B |
| EMEA | Russia | LX.PL902.044 | AS1420P-232G25i W7HP64RUATRU1 MC UMACkk 1*2G/250/6L2.8/5R/ CB_bg_0.3D_AUk_RU11 | CMSU2300B |
| EMEA | Russia | LX.PL902.043 | AS1420P-232G16i W7HP64RUATRU1 MC UMACkk 1*2G/160/BT/6L2.8/5R/ CB_bg_0.3D_AU_RU11 | CMSU2300B |
| EMEA | Russia | LX.PL902.042 | AS1420P-232G25i W7HP64RUATRU1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bg_0.3D_AU_RU11 | CMSU2300B |
| EMEA | France | LX.PL902.041 | AS1420P-233G25n W7HP64ATFR1 MC UMACkk 2G+1G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_FR21 | CMSU2300B |
| EMEA | Algeria | LX.PL902.031 | AS1420P-232G25n EM W7HP64EMATDZ1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES81 | CMSU2300B |
| EMEA | Middle East | LX.PL902.030 | AS1420P-232G25n EM W7HP64EMATME4 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_RU61 | CMSU2300B |
| EMEA | Belgium | LX.PL902.028 | AS1420P-232G25n W7HP64ATBE1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_NL11 | CMSU2300B |
| EMEA | Germany | LX.PL902.026 | AS1420P-232G25n W7HP64ATDE1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_DE11 | CMSU2300B |
| EMEA | Eastern Europe | LX.PL902.025 | AS1420P-232G25n W7HP64ATEU5 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_RO11 | CMSU2300B |
| EMEA | Hungary | LX.PL902.024 | AS1420P-232G25n W7HP64ATHU1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_HU11 | CMSU2300B |
| EMEA | Israel | LX.PL902.023 | AS1420P-232G25n W7HP64ATIL1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_HE11 | CMSU2300B |
| EMEA | Portugal | LX.PL902.022 | AS1420P-232G25n W7HP64ATPT1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_PT11 | CMSU2300B |
| EMEA | France | LX.PL902.021 | AS1420P-232G25n W7HP64ATFR1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_FR21 | CMSU2300B |
| EMEA | Italy | LX.PL902.020 | AS1420P-232G25n W7HP64ATIT1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_IT11 | CMSU2300B |
| EMEA | Austria | LX.PL902.019 | AS1420P-232G25n W7HP64ATAT1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_DE61 | CMSU2300B |
| EMEA | Latvia | LX.PL902.018 | AS1420P-232G25n W7HP64ATLV1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_RU22 | CMSU2300B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| EMEA | Holland | LX.PL902.017 | AS1420P-232G25n W7HP64ATNL1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_NL11 | CMSU2300B |
| EMEA | Eastern Europe | LX.PL902.016 | AS1420P-232G25n W7HP64ATEU7 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ENQ1 | CMSU2300B |
| EMEA | Czech | LX.PL902.015 | AS1420P-232G25n W7HP64ATCZ2 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_SK11 | CMSU2300B |
| EMEA | Denmark | LX.PL902.014 | AS1420P-232G25n W7HP64ATDK2 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ENS1 | CMSU2300B |
| EMEA | Cyprus | LX.PL902.013 | AS1420P-232G25n W7HP64ATCY1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | CMSU2300B |
| EMEA | Eastern Europe | LX.PL902.012 | AS1420P-232G25n W7HP64ATEU5 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_PL71 | CMSU2300B |
| EMEA | Eastern Europe | LX.PL902.011 | AS1420P-232G25n W7HP64ATEU4 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_SV21 | CMSU2300B |
| EMEA | Poland | LX.PL902.010 | AS1420P-232G25n W7HP64ATPL1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_PL11 | CMSU2300B |
| EMEA | UK | LX.PL902.009 | AS1420P-232G25n W7HP64ATGB1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_EN11 | CMSU2300B |
| EMEA | Greece | LX.PL902.008 | AS1420P-232G25n W7HP64ATGR1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_EL31 | CMSU2300B |
| EMEA | Serbia/ Macedonia | LX.PL902.007 | AS1420P-232G25n W7HP64ATCS1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_SL11 | CMSU2300B |
| EMEA | Switzerland | LX.PL902.006 | AS1420P-232G25n W7HP64ATCH1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_IT41 | CMSU2300B |
| EMEA | Eastern Europe | LX.PL902.004 | AS1420P-232G25n W7HP64ATEU7 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_SL11 | CMSU2300B |
| EMEA | Luxembourg | LX.PL902.005 | AS1420P-232G25n W7HP64ATLU3 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_IT41 | CMSU2300B |
| AAP | Australia/ New Zealand | LX.PL902.003 | AS1420P-232G25n W7HP64ATAU1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | CMSU2300B |
| TWN | GCTWN | LX.PL902.002 | AS1420P-232G25n W7HP64ATTW1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_TC11 | CMSU2300B |
| WW | WW | S2.PL907.001 | AS1420P-743G32n W7UT64AWW1 MC UMACkk 1G+2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES62 | CM743B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| WW | WW | S2.PL907.002 | AS1420P-232G25n W7UT64AWW1 MC UMACkk 2*1G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES62 | CMSU230 0B |
| WW | WW | S2.PNE02.001 | AS1420P-232G25n W7HP64AWW1 MC UMACrr 2*1G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES62 | CMSU230 0B |
| WW | WW | S2.PNG02.001 | AS1420P-232G25n W7HP64AWW1 MC UMAGCbb 2*1G/250/BT/6L2.8/5R/ CB_bgn_0.3D_E77W_AU_ES62 | CMSU230 0B |
| PA | USA | LX.PNF07.001 | AS1420P-232G25n W7UT64AUS1 MC UMAGCkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_E77MS_AU_ENP1 | CMSU230 0B |
| WW | WW | S2.PNF02.001 | AS1420P-232G25n W7HP64AWW1 MC UMAGCkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_E77W_AU_ES62 | CMSU230 0B |
| WW | WW | S2.PNH02.001 | AS1420P-741G25n W7HP64AWW1 MC UMAGCrr 1*1G/250/BT/6L2.8/5R/ CB_bgn_0.3D_E77W_AU_ES62 | CM743B |
| TWN | GCTWN | LX.PNB02.013 | AS1820PTZ-412G50n W7HP64ATTW1 MC UMACbb 1*2G/500_L/BT/6L2.8/5R/ CB_bgn_0.3D_AU_TC11 | PMDSU41 00B |
| TWN | GCTWN | LX.PNB02.014 | AS1820PTZ-412G32n W7HP64ATTW1 MC UMACbb 1*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_TC11 | PMDSU41 00B |
| AAP | Malaysia | LX.PNB02.012 | AS1820PTZ-412G32n EM W7HP64EMATMY1 MC UMACbb 1*2G/320/ BT/6L2.8/5R/CB_bgn_0.3D_AU_ES61 | PMDSU41 00B |
| AAP | Malaysia | LX.PNB02.011 | AS1820PTZ-411G25n EM W7HP64EMATMY1 MC UMACbb 1*1G/250/ BT/6L2.8/5R/CB_bgn_0.3D_AU_ES61 | PMDSU41 00B |
| CHINA | Hong Kong | LX.PNB02.015 | AS1820PTZ-412G32n W7HP64ATHK2 MC UMACbb 1*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AUb_ZH34 | PMDSU41 00B |
| CHINA | China | LX.PNB02.016 | AS1820PTZ-414G32n W7HP64SCATCN1 MC UMACbb 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AUb_SC14 | PMDSU41 00B |
| AAP | Singapore | LX.PNB02.010 | AS1820PTZ-414G32n W7HP64ATSG1 MC UMACbb 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU41 00B |
| AAP | Singapore | LX.PNB02.009 | AS1820PTZ-412G32n W7HP64ATSG1 MC UMACbb 1*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU41 00B |
| AAP | Singapore | LX.PNB02.008 | AS1820PTZ-414G25n W7HP64ATSG1 MC UMACbb 2*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU41 00B |
| AAP | Singapore | LX.PNB02.007 | AS1820PTZ-413G16n W7HP64ATSG1 MC UMACbb 2G+1G/160/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU41 00B |
| AAP | Singapore | LX.PNB02.006 | AS1820PTZ-413G25n W7HP64ATSG1 MC UMACbb 2G+1G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU41 00B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| AAP | Singapore | LX.PNB02.005 | AS1820PTZ-413G32n W7HP64ATSG1 MC UMACbb 2G+1G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNB02.004 | AS1820PTZ-412G25n W7HP64ATSG1 MC UMACbb 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNB02.003 | AS1820PTZ-412G16n W7HP64ATSG1 MC UMACbb 1*2G/160/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| EMEA | Spain | LX.PNB02.002 | AS1820PTZ-413G32n W7HP64ATES1 MC UMACbb 2G+1G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES51 | PMDSU4100B |
| WW | WW | S2.PNB02.001 | AS1820PTZ-414G25n W7HP64AWW1 MC UMACbb 2*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES62 | PMDSU4100B |
| EMEA | France | LX.PNB02.001 | AS1820PTZ-414G32n W7HP64ATFR1 MC UMACbb 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_FR21 | PMDSU4100B |
| EMEA | France | LX.PNA02.001 | AS1820PTZ-414G32n W7HP64ATFR1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_FR21 | PMDSU4100B |
| CHINA | Hong Kong | LX.PNA02.016 | AS1820PTZ-412G32n W7HP64ATHK2 MC UMACkk 1*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AUk_ZH34 | PMDSU4100B |
| AAP | Vietnam | LX.PNA02.011 | AS1820PTZ-412G25n EM W7HP64EMATVN1 MC UMACkk 1*2G/250/ BT/6L2.8/5R/CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Malaysia | LX.PNA02.012 | AS1820PTZ-411G25n EM W7HP64EMATMY1 MC UMACkk 1*1G/250/ BT/6L2.8/5R/CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Malaysia | LX.PNA02.013 | AS1820PTZ-412G32n EM W7HP64EMATMY1 MC UMACkk 1*2G/320/ BT/6L2.8/5R/CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| CHINA | China | LX.PNA02.015 | AS1820PTZ-414G32n W7HP64SCATCN1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AUk_SC14 | PMDSU4100B |
| EMEA | Switzerland | LX.PNA02.014 | AS1820PTZ-414G32n W7HP64ATCH1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_IT41 | PMDSU4100B |
| AAP | Singapore | LX.PNA02.005 | AS1820PTZ-412G32n W7HP64ATSG1 MC UMACkk 1*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNA02.010 | AS1820PTZ-414G25n W7HP64ATSG1 MC UMACkk 2*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNA02.009 | AS1820PTZ-414G32n W7HP64ATSG1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNA02.008 | AS1820PTZ-413G32n W7HP64ATSG1 MC UMACkk 2G+1G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| AAP | Singapore | LX.PNA02.007 | AS1820PTZ-413G25n W7HP64ATSG1 MC UMACkk 2G+1G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNA02.006 | AS1820PTZ-413G16n W7HP64ATSG1 MC UMACkk 2G+1G/160/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNA02.004 | AS1820PTZ-412G25n W7HP64ATSG1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNA02.003 | AS1820PTZ-412G16n W7HP64ATSG1 MC UMACkk 1*2G/160/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| WW | WW | S2.PNA02.001 | AS1820PTZ-412G50n W7HP64AWW1 MC UMACkk 2*1G/500_L/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES62 | PMDSU4100B |
| EMEA | Spain | LX.PNA02.002 | AS1820PTZ-413G32n W7HP64ATES1 MC UMACkk 2G+1G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES51 | PMDSU4100B |
| CHINA | Hong Kong | LX.PNC02.014 | AS1820PTZ-412G32n W7HP64ATHK2 MC UMACrr 1*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AUr_ZH34 | PMDSU4100B |
| AAP | Malaysia | LX.PNC02.012 | AS1820PTZ-411G25n EM W7HP64EMATMY1 MC UMACrr 1*1G/250/ BT/6L2.8/5R/CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Malaysia | LX.PNC02.011 | AS1820PTZ-412G32n EM W7HP64EMATMY1 MC UMACrr 1*2G/320/ BT/6L2.8/5R/CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| CHINA | China | LX.PNC02.013 | AS1820PTZ-414G32n W7HP64SCATCN1 MC UMACrr 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AUr_SC14 | PMDSU4100B |
| AAP | Singapore | LX.PNC02.010 | AS1820PTZ-414G32n W7HP64ATSG1 MC UMACrr 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNC02.009 | AS1820PTZ-414G25n W7HP64ATSG1 MC UMACrr 2*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNC02.008 | AS1820PTZ-413G16n W7HP64ATSG1 MC UMACrr 2G+1G/160/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNC02.007 | AS1820PTZ-413G25n W7HP64ATSG1 MC UMACrr 2G+1G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNC02.005 | AS1820PTZ-412G32n W7HP64ATSG1 MC UMACrr 1*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNC02.006 | AS1820PTZ-413G32n W7HP64ATSG1 MC UMACrr 2G+1G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| AAP | Singapore | LX.PNC02.004 | AS1820PTZ-412G25n W7HP64ATSG1 MC UMACrr 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| AAP | Singapore | LX.PNC02.003 | AS1820PTZ-412G16n W7HP64ATSG1 MC UMACrr 1*2G/160/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES61 | PMDSU4100B |
| EMEA | Spain | LX.PNC02.002 | AS1820PTZ-413G32n W7HP64ATES1 MC UMACrr 2G+1G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES51 | PMDSU4100B |
| WW | WW | S2.PNC02.001 | AS1820PTZ-414G25n W7HP64AWW1 MC UMACrr 2*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_AU_ES62 | PMDSU4100B |
| EMEA | France | LX.PNC02.001 | AS1820PTZ-414G32n W7HP64ATFR1 MC UMACrr 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_AU_FR21 | PMDSU4100B |
| WW | WW | S2.PN802.001 | AS1820PTZ-414G25n W7HP64AWW1 MC UMAGCbb 2*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_E77W_AU_ES62 | PMDSU4100B |
| AAP | Australia/ New Zealand | LX.PLM02.004 | AS1820PTZ-412G25n W7HP64ATAU1 MC UMAGCkk 1*2G/250/BT/6L2.8/5R/ CB_bgn_0.3D_E77W_AU_ES61 | PMDSU4100B |
| AAP | Australia/ New Zealand | LX.PLM02.003 | AS1820PTZ-412G32n W7HP64ATAU1 MC UMAGCkk 1*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_E77W_AU_ES61 | PMDSU4100B |
| AAP | Australia/ New Zealand | LX.PLM02.002 | AS1820PTZ-413G25n W7HP64ATAU1 MC UMAGCkk 2G+1G/250/BT/6L2.8/5R/ CB_bgn_0.3D_E77W_AU_ES61 | PMDSU4100B |
| AAP | Australia/ New Zealand | LX.PLM02.001 | AS1820PTZ-414G32n W7HP64ATAU1 MC UMAGCkk 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_E77W_AU_ES61 | PMDSU4100B |
| WW | WW | S2.PLM07.001 | AS1820PTZ-414G32n W7UT64AWW1 MC UMAGCkk 2*2G/320/BT/6L2.8/5R/ CB_bgn_0.3D_E77W_AU_ES62 | PMDSU4100B |
| WW | WW | S2.PN902.001 | AS1820PTZ-413G25n W7HP64AWW1 MC UMAGCrr 2G+1G/250/BT/6L2.8/5R/ CB_bgn_0.3D_E77W_AU_ES62 | PMDSU4100B |
| TWN | GCTWN | LX.PN402.013 | AS1820PT-732G50n W7HP64ATTW1 MC UMACbb 1*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_AU_TC11 | C2DSU7300B |
| CHINA | Hong Kong | LX.PN402.014 | AS1820PT-732G32n W7HP64ATHK2 MC UMACbb 1*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AUb_ZH34 | C2DSU7300B |
| AAP | Australia/ New Zealand | LX.PN402.002 | AS1820PT-732G25n W7HP64ATAU1 MC UMACbb 1*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN402.012 | AS1820PT-733G32n W7HP64ATSG1 MC UMACbb 2G+1G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN402.011 | AS1820PT-732G32n W7HP64ATSG1 MC UMACbb 1*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN402.010 | AS1820PT-732G25n W7HP64ATSG1 MC UMACbb 1*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| AAP | Singapore | LX.PN402.009 | AS1820PT-734G32n W7HP64ATSG1 MC UMACbb 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN402.008 | AS1820PT-734G25n W7HP64ATSG1 MC UMACbb 2*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN402.007 | AS1820PT-733G25n W7HP64ATSG1 MC UMACbb 2G+1G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN402.006 | AS1820PT-732G16n W7HP64ATSG1 MC UMACbb 1*2G/160/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN402.005 | AS1820PT-733G16n W7HP64ATSG1 MC UMACbb 2G+1G/160/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| EMEA | France | LX.PN402.004 | AS1820PT-734G50n W7HP64ATFR1 MC UMACbb 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_AU_FR21 | C2DSU7300B |
| WW | WW | S2.PN402.001 | AS1820PT-732G25n W7HP64AWW1 MC UMACbb 1*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES62 | C2DSU7300B |
| PA | Canada | LX.PN402.003 | AS1820PT-733G32n W7HP64ATCA2 MC UMACbb 2G+1G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_FR81 | C2DSU7300B |
| EMEA | France | LX.PN402.001 | AS1820PT-734G32n W7HP64ATFR1 MC UMACbb 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_FR21 | C2DSU7300B |
| EMEA | Middle East | LX.PN302.029 | AS1820PT-734G32n EM W7HP64EMATME4 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| EMEA | Middle East | LX.PN302.034 | AS1820PT-734G32n EM W7HP64EMATME2 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_AR11 | C2DSU7300B |
| EMEA | Middle East | LX.PN302.036 | AS1820PT-734G32n EM W7HP64EMATME2 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| EMEA | Middle East | LX.PN302.025 | AS1820PT-734G32n EM W7HP64EMATME3 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES81 | C2DSU7300B |
| EMEA | Middle East | LX.PN302.035 | AS1820PT-734G32n EM W7HP64EMATME6 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| EMEA | Middle East | LX.PN302.030 | AS1820PT-734G32n EM W7HP64EMATME2 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_AR21 | C2DSU7300B |
| EMEA | Middle East | LX.PN302.038 | AS1820PT-734G32n EM W7HP64EMATME9 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES81 | C2DSU7300B |
| EMEA | Turkey | LX.PN302.033 | AS1820PT-734G32n EM W7HP64EMATTR1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_TR31 | C2DSU7300B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| EMEA | South Africa | LX.PN302.032 | AS1820PT-734G32n EM W7HP64EMATZA4 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| EMEA | South Africa | LX.PN302.037 | AS1820PT-734G32n EM W7HP64EMATZA1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES81 | C2DSU7300B |
| EMEA | South Africa | LX.PN302.031 | AS1820PT-734G32n EM W7HP64EMATZA2 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| CHINA | China | LX.PN302.057 | AS1820PT-734G32n W7HP64SCATCN1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AUk_SC14 | C2DSU7300B |
| CHINA | Hong Kong | LX.PN302.058 | AS1820PT-732G32n W7HP64ATHK2 MC UMACkk 1*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AUk_ZH34 | C2DSU7300B |
| AAP | Australia/ New Zealand | LX.PN302.043 | AS1820PT-732G25n W7HP64ATAU1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| EMEA | Germany | LX.PN302.056 | AS1820PT-734G32n W7HP64ATDE1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AUk_DE11 | C2DSU7300B |
| EMEA | Switzerland | LX.PN302.055 | AS1820PT-734G50n W7HP64ATCH1 MC UMACkk 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_AU_IT41 | C2DSU7300B |
| AAP | Singapore | LX.PN302.054 | AS1820PT-734G32n W7HP64ATSG1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN302.053 | AS1820PT-732G32n W7HP64ATSG1 MC UMACkk 1*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Indonesia | LX.PN302.052 | AS1820PT-732G50n EM W7HP64EMATID1 MC UMACkk 1*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_AU_ID21 | C2DSU7300B |
| AAP | Singapore | LX.PN302.050 | AS1820PT-733G32n W7HP64ATSG1 MC UMACkk 2G+1G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN302.051 | AS1820PT-734G25n W7HP64ATSG1 MC UMACkk 2*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN302.049 | AS1820PT-732G16n W7HP64ATSG1 MC UMACkk 1*2G/160/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN302.048 | AS1820PT-733G25n W7HP64ATSG1 MC UMACkk 2G+1G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN302.047 | AS1820PT-733G16n W7HP64ATSG1 MC UMACkk 2G+1G/160/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| AAP | Singapore | LX.PN302.046 | AS1820PT-732G25n W7HP64ATSG1 MC UMACkk 1*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| AAP | Singapore | LX.PN302.045 | AS1820PT-734G50n W7HP64ATSG1 MC UMACkk 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| EMEA | UK | LX.PN302.044 | AS1820PT-734G25n W7HP64ATGB1 MC UMACkk 2*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_EN11 | C2DSU7300B |
| EMEA | France | LX.PN302.042 | AS1820PT-734G50n W7HP64ATFR1 MC UMACkk 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_AU_FR21 | C2DSU7300B |
| WW | WW | S2.PN302.001 | AS1820PT-734G32n W7HP64AWW1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES62 | C2DSU7300B |
| PA | Canada | LX.PN302.041 | AS1820PT-733G32n W7HP64ATCA2 MC UMACkk 2G+1G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_FR81 | C2DSU7300B |
| EMEA | Middle East | LX.PN302.027 | AS1820PT-734G32n EM W7HP64EMATME4 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_RU61 | C2DSU7300B |
| EMEA | Russia | LX.PN302.040 | AS1820PT-734G32i W7HP64RUATRU1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_abg_0.3D_AU_RU11 | C2DSU7300B |
| EMEA | Algeria | LX.PN302.028 | AS1820PT-734G32n EM W7HP64EMATDZ1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES81 | C2DSU7300B |
| EMEA | Ukraine | LX.PN302.039 | AS1820PT-734G32i W7HP64RUATUK1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_abg_0.3D_AU_RU61 | C2DSU7300B |
| EMEA | France | LX.PN302.018 | AS1820PT-734G32n W7HP64ATFR1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_FR21 | C2DSU7300B |
| EMEA | Germany | LX.PN302.024 | AS1820PT-734G32n W7HP64ATDE1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_DE11 | C2DSU7300B |
| EMEA | Belgium | LX.PN302.026 | AS1820PT-734G32n W7HP64ATBE1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_NL11 | C2DSU7300B |
| EMEA | Israel | LX.PN302.021 | AS1820PT-734G32n W7HP64ATIL1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_HE11 | C2DSU7300B |
| EMEA | Austria | LX.PN302.016 | AS1820PT-734G32n W7HP64ATAT1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_DE61 | C2DSU7300B |
| EMEA | Eastern Europe | LX.PN302.023 | AS1820PT-734G32n W7HP64ATEU5 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_RO11 | C2DSU7300B |
| EMEA | Portugal | LX.PN302.019 | AS1820PT-734G32n W7HP64ATPT1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_PT11 | C2DSU7300B |
| EMEA | Hungary | LX.PN302.022 | AS1820PT-734G32n W7HP64ATHU1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_HU11 | C2DSU7300B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| EMEA | Spain | LX.PN302.020 | AS1820PT-734G32n W7HP64ATES1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES51 | C2DSU7300B |
| EMEA | Italy | LX.PN302.017 | AS1820PT-734G32n W7HP64ATIT1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_IT11 | C2DSU7300B |
| EMEA | Eastern Europe | LX.PN302.009 | AS1820PT-734G32n W7HP64ATEU5 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_PL71 | C2DSU7300B |
| EMEA | Holland | LX.PN302.014 | AS1820PT-734G32n W7HP64ATNL1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_NL11 | C2DSU7300B |
| EMEA | Czech | LX.PN302.012 | AS1820PT-734G32n W7HP64ATCZ2 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_SK11 | C2DSU7300B |
| EMEA | Latvia | LX.PN302.015 | AS1820PT-734G32n W7HP64ATLV1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_RU22 | C2DSU7300B |
| EMEA | Eastern Europe | LX.PN302.013 | AS1820PT-734G32n W7HP64ATEU7 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ENQ1 | C2DSU7300B |
| EMEA | Eastern Europe | LX.PN302.008 | AS1820PT-734G32n W7HP64ATEU4 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_SV21 | C2DSU7300B |
| EMEA | Cyprus | LX.PN302.010 | AS1820PT-734G32n W7HP64ATCY1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU7300B |
| EMEA | Denmark | LX.PN302.011 | AS1820PT-734G32n W7HP64ATDK2 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ENS1 | C2DSU7300B |
| EMEA | Poland | LX.PN302.007 | AS1820PT-734G32n W7HP64ATPL1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_PL11 | C2DSU7300B |
| EMEA | Switzerland | LX.PN302.003 | AS1820PT-734G32n W7HP64ATCH1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_IT41 | C2DSU7300B |
| EMEA | Greece | LX.PN302.005 | AS1820PT-734G32n W7HP64ATGR1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_EL31 | C2DSU7300B |
| EMEA | Luxembourg | LX.PN302.002 | AS1820PT-734G32n W7HP64ATLU3 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_IT41 | C2DSU7300B |
| EMEA | UK | LX.PN302.006 | AS1820PT-734G32n W7HP64ATGB1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_EN11 | C2DSU7300B |
| EMEA | Eastern Europe | LX.PN302.001 | AS1820PT-734G32n W7HP64ATEU7 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_SL11 | C2DSU7300B |
| EMEA | Serbia/ Macedonia | LX.PN302.004 | AS1820PT-734G32n W7HP64ATCS1 MC UMACkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_SL11 | C2DSU7300B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| AAP | Philippines | LX.PN502.011 | AS1820PT-732G25n EM W7HP64EMATPH1 MC UMACrr 1*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU730 0B |
| CHINA | Hong Kong | LX.PN502.013 | AS1820PT-732G32n W7HP64ATHK2 MC UMACrr 1*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AUr_ZH34 | C2DSU730 0B |
| CHINA | China | LX.PN502.012 | AS1820PT-734G32n W7HP64SCATCN1 MC UMACrr 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AUr_SC14 | C2DSU730 0B |
| AAP | Singapore | LX.PN502.010 | AS1820PT-734G25n W7HP64ATSG1 MC UMACrr 2*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU730 0B |
| AAP | Singapore | LX.PN502.009 | AS1820PT-734G32n W7HP64ATSG1 MC UMACrr 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU730 0B |
| AAP | Singapore | LX.PN502.008 | AS1820PT-733G32n W7HP64ATSG1 MC UMACrr 2G+1G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU730 0B |
| AAP | Singapore | LX.PN502.007 | AS1820PT-732G32n W7HP64ATSG1 MC UMACrr 1*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU730 0B |
| AAP | Singapore | LX.PN502.006 | AS1820PT-732G25n W7HP64ATSG1 MC UMACrr 1*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU730 0B |
| AAP | Singapore | LX.PN502.005 | AS1820PT-733G25n W7HP64ATSG1 MC UMACrr 2G+1G/250/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU730 0B |
| AAP | Singapore | LX.PN502.004 | AS1820PT-733G16n W7HP64ATSG1 MC UMACrr 2G+1G/160/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU730 0B |
| AAP | Singapore | LX.PN502.003 | AS1820PT-732G16n W7HP64ATSG1 MC UMACrr 1*2G/160/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES61 | C2DSU730 0B |
| EMEA | France | LX.PN502.002 | AS1820PT-734G50n W7HP64ATFR1 MC UMACrr 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_AU_FR21 | C2DSU730 0B |
| WW | WW | S2.PN502.001 | AS1820PT-734G50n W7HP64AWW1 MC UMACrr 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_AU_ES62 | C2DSU730 0B |
| EMEA | France | LX.PN502.001 | AS1820PT-734G32n W7HP64ATFR1 MC UMACrr 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_AU_FR21 | C2DSU730 0B |
| EMEA | Germany | LX.PN602.001 | AS1820PT-734G50n W7HP64ATDE1 MC UMAGCbb 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_E77W_AU_DE11 | C2DSU730 0B |
| WW | WW | S2.PN602.001 | AS1820PT-733G32n W7HP64AWW1 MC UMAGCbb 2G+1G/320/BT/6L2.8/5R/ CB_n2_0.3D_E77W_AU_ES62 | C2DSU730 0B |
| AAP | Australia/ New Zealand | LX.PLN02.009 | AS1820PT-732G32n W7HP64ATAU1 MC UMAGCkk 1*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_E77W_AU_ES61 | C2DSU730 0B |

| RO | Country | Acer Part No | Description | CPU |
|---|---|---|---|---|
| AAP | Australia/ New Zealand | LX.PLN02.008 | AS1820PT-732G25n W7HP64ATAU1 MC UMAGCkk 1*2G/250/BT/6L2.8/5R/ CB_n2_0.3D_E77W_AU_ES61 | C2DSU730 0B |
| EME A | UK | LX.PLN02.010 | AS1820PT-733G16n W7HP64ATGB1 MC UMAGCkk 2G+1G/160/BT/6L2.8/5R/ CB_n2_0.3D_E77W_AUk_EN11 | C2DSU730 0B |
| EME A | Germany | LX.PLN02.007 | AS1820PT-734G50n W7HP64ATDE1 MC UMAGCkk 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_E77W_AU_DE11 | C2DSU730 0B |
| AAP | Australia/ New Zealand | LX.PLN02.006 | AS1820PT-734G50n W7HP64ATAU1 MC UMAGCkk 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_E77W_AU_ES61 | C2DSU730 0B |
| AAP | Australia/ New Zealand | LX.PLN02.005 | AS1820PT-734G32n W7HP64ATAU1 MC UMAGCkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_E77W_AU_ES61 | C2DSU730 0B |
| AAP | Thailand | LX.PLN02.004 | AS1820PT-734G50n EM W7HP64EMATTH1 MC UMAGCkk 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_G2K_AU_TH41 | C2DSU730 0B |
| AAP | Thailand | LX.PLN02.003 | AS1820PT-734G50n EM W7HP64EMATTH1 MC UMAGCkk 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_E77W_AU_TH41 | C2DSU730 0B |
| TWN | GCTWN | LX.PLN02.002 | AS1820PT-732G32n W7HP64ATTW1 MC UMAGCkk 1*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_G2K_AU_TC11 | C2DSU730 0B |
| AAP | Singapore | LX.PLN02.001 | AS1820PT-734G32n W7HP64ATSG1 MC UMAGCkk 2*2G/320/BT/6L2.8/5R/ CB_n2_0.3D_G2K_AU_ES61 | C2DSU730 0B |
| WW | WW | S2.PLN07.001 | AS1820PT-734G50n W7UT64AWW1 MC UMAGCkk 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_G2K_AU_ES62 | C2DSU730 0B |
| EME A | Germany | LX.PN702.001 | AS1820PT-734G50n W7HP64ATDE1 MC UMAGCrr 2*2G/500_L/BT/6L2.8/5R/ CB_n2_0.3D_E77W_AU_DE11 | C2DSU730 0B |
| WW | WW | S2.PN702.001 | AS1820PT-734G50i W7HP64AWW1 MC UMAGCrr 2*2G/500_L/BT/6L2.8/5R/ CB_abg_0.3D_E77W_AU_ES62 | C2DSU730 0B |

# Test Compatible Components

This computer's compatibility is tested and verified by Acer's internal testing department. All of its system functions are tested under Windows 7 environment.

Refer to the following lists for components, adapter cards, and peripherals which have passed these tests. Regarding configuration, combination and test procedures, please refer to the Aspire one series Compatibility Test Report released by the Acer Mobile System Testing Department.

| BRAND | Type | Description |
|---|---|---|
| **3G** | | |
| | UNDP-1 | 3G UNDP-1 |
| Huawei | EM770W-MSFT | Huawei 3G EM770W-MSFT |
| Huawei | EM770W | Huawei EM770W |
| **A cover** | | |
| | ABS UV Black | A cover ABS UV Black |
| | ABS UV Blue | A cover ABS UV Blue |
| | ABS UV Red | ABS UV Red |
| **Accessory** | | |
| | JM12_MS Protection Bag | Accessory JM12_MS Protection Bag |
| **Adapter** | | |
| DELTA | 30W | Adapter DELTA 30W 19V 1.7x5.5x11 Black ADP-30JH BA LF |
| HIPRO | 30W | Adapter HIPRO 30W 19V 1.7x5.5x11 Black HP-A0301R3 B1LF LF |
| LITE-ON | 30W | Adapter LITE-ON 30W 19V 1.7x5.5x11 Black PA-1300-04AC LF |
| **Audio Codec** | | |
| Realtek | ALC269X | Realtek Audio Codec ALC269X |
| **B cover** | | |
| | Normal w/Camera | Normal w/Camera |
| **Battery** | | |
| SANYO | 6CELL2.8 | Battery SANYO UM-2009F Li-Ion 3S2P SANYO 6 cell 5600mAh Main COMMON |
| SIMPLO | 6CELL2.8 | Battery SIMPLO UM-2009F Li-Ion 3S2P SAMSUNG 6 cell 5600mAh Main COMMON ID:UM09F70 |
| **Bluetooth** | | |
| Foxconn | BT 2.1 | Foxconn Bluetooth BRM 2046 BT2.1 (T60H928.33) f/w:861 |
| **Camera** | | |
| Chicony | 0.3M LDV | Chicony 0.3M LDV Lilac_3GA ( CNF9042-G ) |
| Chicony | 0.3M LDV | Chicony Camera Lilac_2G |
| Liteon | 0.3M LDV | Liteon 0.3M LDV Lily_2GA |
| Liteon | 0.3M LDV | Liteon Camera Lily_2G |
| Suyin | 0.3M LDV | Suyin Camera Rose_2G |
| **Card Reader** | | |
| | 5 in 1-Build in | 5 in 1-Build in MS, MS Pro, SD, SC, XD |

| BRAND | Type | Description |
|---|---|---|
| **CPU** | | |
| INTEL | CMSU2300B | CPU Intel Celeron SU2300 BGA 1.2G 1M 800 10W R-0 |
| INTEL | PMDSU4100B | CPU Intel Core2Dual SU4100 2M 800 |
| INTEL | C2DSU7300B | CPU Intel Core2Dual SU7300 3M 800 R-0 |
| **G sensor** | | |
| | LIS33DETR | G sensor LIS33DETR |
| **HDD** | | |
| HGST | N160GB5.4KS | HDD HGST 2.5" 5400rpm 160GB HTS545016B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm |
| HGST | N250GB5.4KS | HDD HGST 2.5" 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm |
| HGST | N320GB5.4KS | HDD HGST 2.5" 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm |
| HGST | N500GB5.4KS | HDD HGST 2.5" 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm |
| SEAGATE | N160GB5.4KS | HDD SEAGATE 2.5" 5400rpm 160GB ST9160314AS Wyatt SATA LF F/W:0001SDM1 |
| SEAGATE | N250GB5.4KS | HDD SEAGATE 2.5" 5400rpm 250GB ST9250315AS Wyatt SATA LF F/W:0001SDM1 |
| SEAGATE | N320GB5.4KS | HDD SEAGATE 2.5" 5400rpm 320GB ST9320325AS Wyatt SATA LF F/W:0001SDM1 |
| SEAGATE | N500GB5.4KS | HDD SEAGATE 2.5" 5400rpm 500GB ST9500325AS Wyatt SATA LF F/W:0001SDM1 |
| TOSHIBA | N160GB5.4KS | HDD TOSHIBA 2.5" 5400rpm 160GB MK1655GSX Libra SATA LF F/W: FG011J |
| TOSHIBA | N250GB5.4KS | HDD TOSHIBA 2.5" 5400rpm 250GB MK2555GSX Libra SATA LF F/W:FG001J |
| TOSHIBA | N500GB5.4KS | HDD TOSHIBA 2.5" 5400rpm 500GB MK5055GSX Libra SATA LF F/W:FG001J |
| WD | N160GB5.4KS | HDD WD 2.5" 5400rpm 160GB WD1600BEVT-22ZCTO ML160 SATA LF F/W:11.01A11 |
| WD | N250GB5.4KS | HDD WD 2.5" 5400rpm 250GB WD2500BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11 |
| WD | N320GB5.4KS | HDD WD 2.5" 5400rpm 320GB WD3200BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11 |
| WD | N500GB5.4KS | HDD WD 2.5" 5400rpm 500GB WD5000BEVT-22ZAT0 ML250 SATA LF F/W:01.01A01 |
| ACER | NT1T | Keyboard ACER NT-1T JV11 Internal 11 Standard Black NONE Texture |
| **LAN** | | |
| Atheros | AR8131L | Atheros AR8131L |
| **LCD** | | |
| AUO | NLED11.6WXGAG | LED LCD AUO 11.6" WXGA Glare B116XW02 V0 1A (3G) LF 200nit 8ms 500:1 |
| CMO | NLED11.6WXGAG | LED LCD CMO 11.6" WXGA Glare N116B6-L02 C2 LF 200nit 10ms 500:1 |
| LPL | NLED11.6WXGAG | LED LCD LPL 11.6" WXGA Glare LP116WH1-TLA1 LF 200nit 8ms 500:1 |

| BRAND | Type | Description |
|---|---|---|
| SAMSUNG | NLED11.6WXGAG | LED LCD SAMSUNG 11.6" WXGA Glare LTN116AT01-A01 LF 200nit 8ms |
| **MEM** | | |
| A-DATA | SO2GBIII10 | Memory A-DATA SO-DIMM DDRIII 1066 2GB HY7YG1B1674ZM LF 128*8 0.065um |
| ELPIDA | SO1GBIII10 | Memory ELPIDA SO-DIMM DDRIII 1066 1GB EBJ10UE8BDS0-AE-F LF 128*8 0.065um |
| ELPIDA | SO2GBIII10 | Memory ELPIDA SO-DIMM DDRIII 1066 2GB EBJ21UE8BDS0-AE-F LF 128*8 0.065um |
| HYNIX | SO1GBIII10 | Memory HYNIX SO-DIMM DDRIII 1066 1GB HMT112S6BFR6C-G7 N0 LF 64*16 0.055um |
| HYNIX | SO2GBIII10 | Memory HYNIX SO-DIMM DDRIII 1066 2GB HMT125S6BFR8C-G7 N0 LF 128*8 0.055um |
| MICRON | SO1GBIII10 | Memory MICRON SO-DIMM DDRIII 1066 1GB MT8JSF12864HZ-1G1F1 LF 128*8 0.065um |
| MICRON | SO2GBIII10 | Memory MICRON SO-DIMM DDRIII 1066 2GB MT16JSF25664HZ-1G1F1 LF 128*8 0.065um |
| SAMSUNG | SO1GBIII10 | Memory SAMSUNG SO-DIMM DDRIII 1066 1GB M471B2873EH1-CF8 LF 64*16 0.055um |
| SAMSUNG | SO2GBIII10 | Memory SAMSUNG SO-DIMM DDRIII 1066 2GB M471B5673EH1-CF8 LF 128*8 0.055um |
| **NB Chipset** | | |
| INTEL | GS45 | NB Chipset Intel CS GS45NB |
| **SB Chipset** | | |
| INTEL | ICH9M-SFFE | SB Chipset Intel CS AM82801IUX MM#898134 |
| **Software** | | |
| | McAfee | Antivirus application McAfee |
| **VGA Chip** | | |
| None | UMA | UMA (Intel) |
| **WiFi Antenna** | | |
| WNC | PIFA | PIFA |
| **Wiping Cloth** | | |
| | Wiping Cloth | Wiping Cloth Wiping Cloth BAP31-41-51 Wiping Cloth 15x15cm |
| **Wireless LAN** | | |
| INTEL | INT1000H | Lan Intel WLAN 112BN.HMWG MM#903341 |
| INTEL | SP1x2HABG | Lan Intel WLAN 512AG_HMWG Shirley Peak 5100 MM#897072 |
| INTEL | SP1x2HMW | Lan Intel WLAN 512AN_HMWG Shirley Peak 5100 MM#895373 |

# MS Compatibility Test Report

| Test Item | Level | Driver Initial | Graceful Removal | Hot Insert | Surprise Removal | Cold Insert | S3 Removal | S3 Insert | Hibernate Removal | Hibernate Insert | Reboot | Bug NO. / Comment | Expected Result |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Express Card | | | | | | | | | | | | | |
| 1394 | | | | | | | | | | | | | |
| AboCom Express Card\|54 1394A 800Mbs | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1.Plug in Express card. And connect a 1394 HDD device<br>2.Make sure it can read and write. |
| AboCom Express Card\|54 1394B 800Mbs | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| APIOTEX COMBO Express Card Adapter | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| USB 2.0 | | | | | | | | | | | | | |
| APIOTEX USB2.0 Quad Express Card Adapter | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1.Plug in Express card.<br>2.Plug in USB device and make sure it can works. |
| APIOTEX COMBO Express Card Adapter | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| eSATA II | | | | | | | | | | | | | |
| eSATA II Dual Ports Express Card | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1.Plug in Express card.<br>2.make sure it can works. |
| APIOTEK eSATAII 300 Express Caed Adapter | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Card Reader | | | | | | | | | | | | | |
| APIOTEX 24 in 1 Express Card Adapter | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1.Plug in Express card, should be a driver letter pop in my computer taskbar.<br>2.Plug in SD, MS, or XD make sure it can read and writer. |
| ExpressCard Reader 12 in 1 | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| GigaLAN | | | | | | | | | | | | | |
| Maxell Express card\|34 GigabitEthernet adapter | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1.Plug in Express card, should be a driver letter pop in my computer taskbar.<br>2.Plug in a Lan line, and connect to Lan, and make sure it can upload and download. |
| 3G | | | | | | | | | | | | | |
| BandLuxe C100 | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1. Check no yellow bang"!" in device manager.<br>2. Connect to Internet and download a 5MB file.<br>3. Connect to Saturn and download a 100MB file. |
| TV tuner | | | | | | | | | | | | | |
| AVerMedia AVerTV Hybrid Express card | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1.Plug in TV tuner card.<br>2.make sure it can works. |
| AVerMedia AVerTV DVB-T Expresss | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| | | | | | | | | | | | | | |
| Display Port | | | | | | | | | | | | | |
| External Monitor - CRT | | | | | | | | | | | | | |
| View Sonic PF775 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | Please follow CRT monitor test procedure. |
| Graphic Series GT775 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Philip 109P | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Dell 21" | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| External Monitor - LCD | | | | | | | | | | | | | |
| COMPAQ FP 7317 17" (1024*768)(QSMC) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | Please follow CRT monitor test procedure |
| Gateway FPD1730 17"(1280*1024)(QSMC) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| View Sonic (1680*1050) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| CMV CM-930D 17" (1280*1024) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| ACER AL2423W (1920*1200) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Gateway TV 26" (1280*768) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Toshiba TV 37HL869 (1366*768) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| External Monitor - DVI | | | | | | | | | | | | | |
| VP730b 17" (1280*1024)(QSMC) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | Please follow CRT monitor test procedure |
| CMV CM-930D 17" LCD (1280*1024) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Gateway TV 26" (1280*768) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| ACER AL2423W (1920*1200) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Projector | | | | | | | | | | | | | |
| 3M Projector | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Hot plug the projector. Use hot key to switch the displ |
| TV | | | | | | | | | | | | | |
| FERGUSON DV3(QSMC) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1. Check TV display quality. No serious flicker.<br>2. Check NTSC/PAL mode and no garbage or flicker.<br>3. Check if hot key is supported. |
| SONY Trinitron 14" VPL-CX5 | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| LCD TV | | | | | | | | | | | | | |
| Gateway TV 26" (1280*768) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Check TV display quality. No serious flicker. |
| Toshiba TV 37HL869 (1366*768) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| HD TV (HDMI) | | | | | | | | | | | | | |
| Toshiba TV 37HL869 (1366*768) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1. Check TV display quality. No serious flicker. |
| Acer AT4220 (1920*1200) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |

| Test Item | Level | Driver Initial | Graceful Removal | Hot Insert | Surprise Removal | Cold Insert | S3 Removal | S3 Insert | Hibernate Removal | Hibernate Insert | Reboot | Bug NO. / Comment | Expected Result |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **USB Port** | | | | | | | | | | | | | |
| **Keyboard** | | | | | | | | | | | | | |
| i-rocks KR-6910 KeyPad | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Hot plug in a USB keyboard.<br>2. Check no yellow ban "!" in device manager.<br>3. Open wordpad or notepad.<br>4. Check all characters. |
| Atake USB keyboard | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Logitech USB Keyboard | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| WINTEK USB Keyboard | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **Mouse** | | | | | | | | | | | | | |
| Microsoft Basic Optical Mouse v2.0 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Hot plug in a USB mouse.<br>2. Check no yellow ban "!" in device manager.<br>3. Move mouse and make sure mouse move smooth, no delay. (Make a circle) |
| Microsoft IntelliMouse Explorer 3.0 USB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Microsoft IntelliMouse Explorer 4.0 USB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **Printer** | | | | | | | | | | | | | |
| HPC7280 PHOTOSMART Printer | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | inboxdriver | 1. Check no yellow bang in device manager.<br>2. Print a test page. |
| HP deskjet 3535 Printer | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | inboxdriver | |
| **Scanner** | | | | | | | | | | | | | 1. Install driver and check device manager. No yellow bang"!". |
| Epson V750 USB Scanner | L3 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 2. Double click "HP PrecisionScan" which is on the desktop.<br>3. Start to scan the photos. |
| **Speaker** | | | | | | | | | | | | | |
| OZAKI 5.1CH-IN-2SPK Digital Sound | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Hot plug the USB speaker. There is no yellow ban in device manager.<br>2. Play audio CD, the audio should play from USB speaker.<br>3. Check audio quality. |
| KINYO Portable Speaker PS-292 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **Joystick** | | | | | | | | | | | | | |
| Logitech WingMan RUMBLEPAD Joystick | L3 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | when resume from s3 or s4 will no function should remove and insert then the function will OK | 1. Install driver and check device manager. No yellow ban"!".<br>2. Install the game Microsoft Fight Simulator .<br>3. Use the gamepad to play the game more than 30 minutes.<br>4. Make sure it can work fine. |
| i-gota Joystick | L3 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | when resume from s3 or s4 will no function should remove and insert then | |
| Flash Fire SF-7301V Joystick | L3 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | when resume from s3 or s4 will no function should remove and insert then the function will OK | |
| **Camera** | | | | | | | | | | | | | |
| Logitech QuickCam E3500 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Check no yellow ban in device manager after pluging in.<br>2. Open movie maker, record. |
| Logitech QuickCam Cool | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Logitech QuickCam Blue | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| KINYO PCM-531 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| INTOPIC Live Cam 660 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **Card Reader** | | | | | | | | | | | | | |
| SEEHOT CardReader 43 in 1 | L2 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Check all support card function ok.<br>2. No any driver letter missed.<br>3. Copy files from card to c: or from c: to card. |
| **HDD** | | | | | | | | | | | | | |
| SATURNO SATA HDD | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. No yellow bang in device manager while you plug in.<br>2. Copy a 100MB file and check no lost. |
| CUTIE DX eSATA USB2.0 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| ARGOSY HD 530 HDD | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **BD/DVD/CD-RW** | | | | | | | | | | | | | |
| NU External BD Combo | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1. No yellow bang in device manager while you plug in.<br>2.No driver letter lost in my computer.<br>3. Play a VCD/DVD or audio CD and no fram drop. |
| DATA-TEC SATA(NU240S) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Sony DRX-S70U | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Pioneer DVR-X162 | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| MSI PM-DS8A/8X | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Imation HQT | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| **Handy Drive** | | | | | | | | | | | | | |
| Handy drive A-date 16G | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. No yellow bang in device manager while you plug in.<br>2. Copy a 100MB file and check no lost. |
| **FDD** | | | | | | | | | | | | | |
| FDD Panasonic YD-8U10 USB1.0 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Boot from FDD function ok.<br>2. Open my computer and you can see A: driver letter.<br>3. Copy a 1MB file and compare the file. No lost.<br>4. Run DOS |
| Mitsumi USB1.1 Floppy Disk Drvie(QSMC) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no device | |
| SMSC USB1.1 external Floppy Drive(QSMC) | L2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no device | |

| Test Item | Level | Driver Initial | Graceful Removal | Hot Insert | Surprise Removal | Cold Insert | S3 Removal | S3 Insert | Hibernate Removal | Hibernate Insert | Reboot | Bug NO. / Comment | Expected Result |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HUB** | | | | | | | | | | | | | |
| Generic 4-port USB 2.0 HUB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Connect a mouse,printer and keyboard to the HUB and check each devices' function. 2. No any yellow bang in device manager. 3. Connect at least three USB 2.0 devices and check function, like HDD and CD-ROM. |
| TEAC US-4S-20BK 4-Port USB 2.0 HUB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Slim DX-274AP USB1.1 SLIM HUB 4 Port(QSMC) | L2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no device | |
| **3G** | | | | | | | | | | | | | |
| BandLuxe C120 Dongle Modem | L2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no device | 1. Check no yellow bang"!" in device manager. 2. Connect to Internet and download a 5MB file. 3. Connect to Saturn and download a 100MB file. |
| **TV tuner** | | | | | | | | | | | | | |
| AVerMedia AVerTV Hybrid Volar HX | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1.Plug in TV tuner card. 2.make sure it can works. |
| | | | | | | | | | | | | | |
| **Wireless Lan AP** | | | | | | | | | | | | | |
| D-Link DAP-1353(N) | L2 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Connect to local network or Internet via Access Point. 2. Follow Lan card test procedure. |
| BUFFALO WZR-AG300NH(N) | L2 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Corega CG-WLBARN80(N) | L2 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **Bluetooth** | | | | | | | | | | | | | |
| **Bluetooth Mouse** | | | | | | | | | | | | | |
| Bluetooth Mouse (Ferrari 5000) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1.Connect then check function |
| Bluetooth Mouse (Ferrari 1000) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **USB Bluetooth** | | | | | | | | | | | | | |
| Ambeon Bluetooth USB Adapter | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1.Connect then check function |
| i-Tech BlueCON U2 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| ESENSE Bluetooth USB Adapter | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **Bluetooth PDA** | | | | | | | | | | | | | |
| Glofish X600 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1.Connect then check function |
| **Bluetooth headphone** | | | | | | | | | | | | | |
| Nokia Bluetooth Headphone HS-26W | L1 | Fail | Fail | Fail | Fail | Fail | Fail | Fail | Fail | Fail | Fail | e No. 0933-0 | 1.Connect then check function |
| Nokia Bluetooth Headphone BH-703 | L1 | Fail | Fail | Fail | Fail | Fail | Fail | Fail | Fail | Fail | Fail | e No. 0933-0 | |
| Sony Ericsson Headset HBH-DS980 | L1 | Fail | Fail | Fail | Fail | Fail | Fail | Fail | Fail | Fail | Fail | e No. 0933-0 | |
| | | | | | | | | | | | | | |
| **Card Reader** | | | | | | | | | | | | | |
| **MMC Card** | | | | | | | | | | | | | |
| Transcend MMC 1GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Insert MMC Card. Should be a driver letter pop up in r |
| Transcend MMC 2GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **SDHC Card** | | | | | | | | | | | | | |
| Transcend SDHC 8GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Insert SDHC Card. Should be a driver letter pop up in my computer. 2. Check the capacitor of the SD Card. If you are using 128MB SD card, please try to copy 100MB files to SD card. 3. Insert/remove card several times and then check if system can detect correctly. |
| Transcend SDHC 16GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Toshiba SDHC 4GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| ADATA SDHC 16GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| SanDisk SDHC 8GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **SD Adapter** | | | | | | | | | | | | | |
| SanDisk microSD(8GB) Adapter | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | Test with SD card |
| Sandisk SD Adapter | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **MS Card** | | | | | | | | | | | | | |
| Sandisk 64MB MS Card(QSMC) | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Insert MS Card. Should be a driver letter pop up in my |
| **MS Pro Card** | | | | | | | | | | | | | |
| LEXAR 256MB MS Card (MS Pro)(QSMC) | L2 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Insert MS Card. Should be a driver letter pop up in my |
| **MS Pro Duo Card** | | | | | | | | | | | | | |
| Sony MS PRO Duo 4GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Insert MS Card. Should be a driver letter pop up in my |
| SanDisk MS PRO Duo 4GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| SanDisk MS PRO Duo 8GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **MS Duo Adapter** | | | | | | | | | | | | | |
| Sony MS Duo Adapter | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | Test with MS Pro duo card |
| SanDisk MS Duo Adapter | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| **MicroSD** | | | | | | | | | | | | | |
| Sandisk microSD 8G | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | Test with MicroSD to MicroSD to MS Pro Duo Adapter + |
| **MicroSD to MS Pro Duo Adapter** | | | | | | | | | | | | | |
| Transcend microSD(2GB) to MS PRO Duo Adapter | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | Test with MicroSD card + MS Duo Adapter |

| Test Item | Level | Driver Initial | Graceful Removal | Hot Insert | Surprise Removal | Cold Insert | S3 Removal | S3 Insert | Hibernate Removal | Hibernate Insert | Reboot | Bug NO. / Comment | Expected Result |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| XD Card | | | | | | | | | | | | | |
| FUJIFILM XD M-Type 1GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Insert XD Card. Should be a driver letter pop up in my |
| FUJIFILM XD H-Type 1GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| FUJIFILM XD M-Type 2GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| FUJIFILM XD H-Type 2GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| OLYMPUS XD M+ 2GB | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| 1394 Port | | | | | | | | | | | | | |
| 1394-HDD | | | | | | | | | | | | | |
| Clearlight 2.5" Hard Drive Enclosure(40G)(QSMC) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1. No yellow bang in device manager after you plug in. |
| UNIQUE UA351-CB USB2.0/1394 HDD | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| 1394-Cable | | | | | | | | | | | | | |
| 1394 Pear To Pear Cable | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1. Connect two computer via 1394 cable.<br>2. You can see two computs in 1394 network.<br>3. Share a folder from unit 1.<br>4. Transfer files from unit 1 to unit 2 and |
| Audio Jacks Port | | | | | | | | | | | | | |
| Speaker | | | | | | | | | | | | | |
| Creative Inspire 5.1 digital 5600 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Play audio, audio output should auto switch to speaker.<br>2. Check audio quality, no delay.<br>3. Check left & right channel. |
| J-S J1116A Speaker | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | Device break | |
| Beauty Jazz Speaker | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | Device break | |
| Head Phone | | | | | | | | | | | | | |
| Philips Headphone SBC HP090 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Play audio, audio output should auto switch to headphone.<br>2. Check audio quality, no delay.<br>3. Check left & right channel. |
| MONARCH POWER STEREO HEADPHONES MO-J39 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| INTOPIC JAZZ-369 Headphones | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Microphone | | | | | | | | | | | | | |
| Victor MC-D01 Microphone | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | |
| Vio-EP2100 Microphone | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | Device break | |
| SPDIF | | | | | | | | | | | | | |
| Creative Inspire 5.1 digital 5600 | L1 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | | 1. Play audio, audio output should auto switch to headphone. |
| Docking | | | | | | | | | | | | | |
| Cable Docking | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | Follow Docking test case |
| PC Game | | | | | | | | | | | | | |
| Company of Heroes | L1 | Pass | | | | | | | | | | will lag | 1. Follow the install instruction. Make sure the game can |
| Microsoft Flight Simulator X Deluxe Razor 1911 | L1 | Pass | | | | | | | | | | | |
| Eidos -Tomb Raider | L1 | Pass | | | | | | | | | | | |
| Supreme Commander | L1 | Pass | | | | | | | | | | | |
| Command & Conquer 3 Tiberium Wars | L1 | N/A | | | | | | | | | | don't support | |
| Unreal Tournament 3 (2007) | L2 | Pass | | | | | | | | | | don't support | |
| QUAKE 4 | L3 | Pass | | | | | | | | | | | |
| Crysis | L3 | N/A | | | | | | | | | | | |
| Enemy Territory - Quake Wars | L1 | Pass | | | | | | | | | | | |
| World in Conflict | L1 | Pass | | | | | | | | | | | |
| Tomb Raider Anniversary | L1 | Pass | | | | | | | | | | | |
| Call of Duty 4 | L1 | Pass | | | | | | | | | | | |
| Far Cry 2 | L1 | Pass | | | | | | | | | | will lag | |
| WarhammerR 40,000 Dawn of WarR II | L1 | Pass | | | | | | | | | | | |
| On Line Game | | | | | | | | | | | | | |
| Lineage II: The Chaotic Throne - Gracia [貳幕-格勒西亞 | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | 1. Follow the install instruction. Make sure the game can |
| World Of Warcraft - Wrath of the Lich King [巫妖王之怒 | L1 | Pass | | | | | | | | | | | |

| Test Item | Level | Driver Initial | Graceful Removal | Hot Insert | Surprise Removal | Cold Insert | S3 Removal | S3 Insert | Hibernate Removal | Hibernate Insert | Reboot | Bug NO. / Comment | Expected Result |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Additional S/W AP | | | | | | | | | | | | | |
| Microsoft Office2010 | L1 | Pass | | | | | | | | | | | Install the software and check the function works, No err |
| SPECviewperf 10 or later ( OpenGL Tool) | L1 | N/A | | | | | | | | | | | |
| Works 9.0 or later | L1 | N/A | | | | | | | | | | | |
| Skype 4.0 or later | L1 | N/A | | | | | | | | | | | |
| MSN 9.0 or later | L1 | N/A | | | | | | | | | | | |
| Yahoo Messager 9.0 or later | L2 | N/A | | | | | | | | | | | |
| VMWare 6.0 or later | L3 | N/A | | | | | | | | | | | |
| Blu-Ray | | | | | | | | | | | | | |
| Bail (H.264 1080i)---Play chapter2 (Made in U.S.A) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | Make sure below function works<br>1. Install/Uninstall Player<br>2. Region check<br>3. Check Audio and video Quality at full screen play and normal play at least 30 minutes (every discs), and Blood Diamond must play to end.<br>4. CPU Usage <80%<br>5. Frame display and Audio can't lag or auto shut down in AC/DC.<br>6. No interfere with Game/DVD/HD-DVD/BD/Audio play when peripheral device(Bluetooth...) turn on/off or volume adjust<br>7. DVD/HD-DVD/BD playback simultaneously,external monitor can't black disaply<br>8. Resolution must be kept after LCD/CRT switch or resume from S3/S4/Reboot |
| 火凤燎原( H.264 1080i)---Play chapter1 (Made in JPN) | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Blood Diamond (VC-1 1080P)---Play chapter3 (Made in | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Spring in JPN (MPEG-2 1080i)----Play chapter3 (Made | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Resident evil3 (H.264 1080P Profile 1.1+PIP)-----Play c | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Saw IV | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Sunshine | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| War | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Cars | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Spider Man 3 | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| The Last Stand | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| The Architect | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| Resdient Evil：Extinction | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |
| ILHA Formosa | L1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | no support | |

# Online Support Information

This section describes online technical support services available to help you repair your Acer Systems.

If you are a distributor, dealer, ASP or TPM, please refer your technical queries to your local Acer branch office. Acer Branch Offices and Regional Business Units may access our website. However some information sources will require a user i.d. and password. These can be obtained directly from Acer CSD Taiwan.

Acer's Website offers you convenient and valuable support resources whenever you need them.

In the Technical Information section you can download information on all of Acer's Notebook, Desktop and Server models including:

- Service guides for all models
- User's manuals
- Training materials
- Bios updates
- Software utilities
- Spare parts lists
- TABs (Technical Announcement Bulletin)

For these purposes, we have included an Acrobat File to facilitate the problem-free downloading of our technical material.

Also contained on this website are:

- Detailed information on Acer's International Traveler's Warranty (ITW)
- Returned material authorization procedures
- An overview of all the support services we offer, accompanied by a list of telephone, fax and email contacts for all your technical queries.

We are always looking for ways to optimize and improve our services, so if you have any suggestions or comments, please do not hesitate to communicate these to us.

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